

KPU 2050

# OFFICIAL CAMPUS PLAN

KPU TECH PLAN







**KPU2050**  
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Illustrative rendering of the KPU Tech campus conceptual design







LEGEND

- Walking Radius from Main Campus Building
- ➡ Transit Routes
- ➡ Municipal Cycling Routes

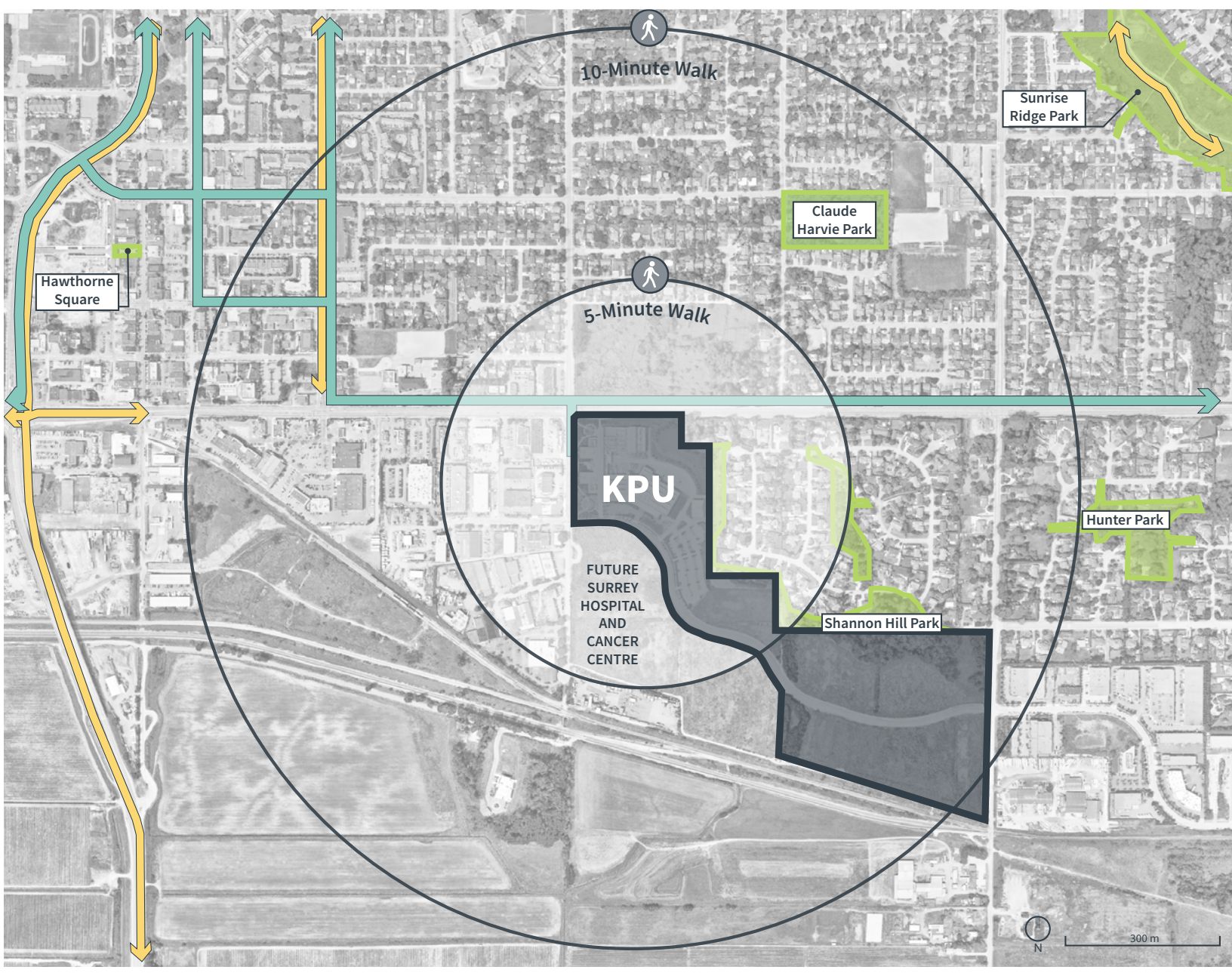


Figure 1 — KPU Tech Campus Context



# T.1

## KPU Tech in Context

### T.1.1. COMMUNITY PROFILE

Cloverdale Town Centre is the Surrey's first urban settlement and is home to the city's historic downtown. It is a community that is older than the city average, with 40% of the population being over 50 years old, compared with 34% citywide. Households are smaller than average, the majority being 1-2 people.

Cloverdale Town Centre is becoming more urban through redevelopment. New commercial and multi-family residential buildings have been developed along Highway 10 and Highway 15, attracting new residents and amenities in the process.

### T.1.2. SURROUNDING USES

The KPU Tech campus is located on the southeast border of Cloverdale Town Centre. The campus is surrounded by residential, industrial, and service commercial uses. Single family residential is the primary use for the majority of the area north of the campus. Areas east and west of the campus are zoned IL and made up of light industrial uses. To the northwest of the campus are highway commercial uses such as a Kal Tire, Stampede Tack and Western Wear, fast food restaurants and other strip mall commercial uses.

Historically, agricultural uses have defined the character of Cloverdale Town Centre. The effects are present to this day.

In 2019, the Province of BC proposed that a new hospital and cancer research centre be located on the site south of KPU's Tech's main building. While the proposal is still under review at the time that the KPU Tech Concept Plan is being prepared, placeholder language has been included to ensure that the Plan accommodates this possible future initiative.





**Figure 2 — KPU Tech Concept Plan**

- ① Main campus entrance is repositioned towards the street
- ② New signature building addition and exhibition plaza at the corner of 180 Street and 55 Avenue
- ③ Revamped loading area to also function as a makerspace and demonstration plaza
- ④ A new treed pedestrian and cycling friendly streetscape enhancement for 55 Avenue
- ⑤ Opportunity to expand and create a new park open space connected to 56 Avenue with an outdoor pavilion and ampitheatre seating to view the makerspace and demonstration plaza
- ⑥ New building gives opportunities for additional academic space, revenue generation, amenities, industry and/or research programs
- ⑦ Extended trail network connecting the community and adjacent park by creating a recreational trail loop
- ⑧ Protected riparian landscapes and green spaces
- ⑨ New open spaces to provide a series of uses, programs and destinations along 55 Avenue
- ⑩ Buffered edge and hydro corridor along 184 Avenue.



# T.2

## KPU Tech Concept Plan

The KPU Tech Concept Plan builds on the existing campus presence located at the corner of Highway 10 (56 Ave) and 180 Street and expands the campus east along 55 Avenue, creating three distinct campus nodes. New landmark buildings and building additions to the current building structure, and an enhanced landscape provide a new frontage and presence for KPU at the corner. Eventually, 55th Avenue will become the main link through the campus along which a series of new signature buildings and open spaces define the sinuous roadway and are positioned to provide a new frontage and animation to the proposed future Surrey Hospital and Cancer Centre development in the lands south of the campus.

The eastern area of the campus is now defined by a new campus precinct with four new buildings and a variety of new open spaces that create a new presence and opportunities for synergistic relationships with the hospital and for future industry partnerships. Connecting these two distinct east and west campus areas is a central hub of two new buildings and open spaces that function as the social magnet and concentrate campus amenities to service both ends of the campus as well as the hospital community.

Acknowledging the residential neighbourhood to the north, the Plan proposes improved pedestrian connections through Shannon Hill Park to create a more seamless relationship between campus and community.

The Concept Plan highlights include:

- A new significant presence and identity along Highway 10 and 180 Street
- An enhanced experiential learning environment with new spaces to showcase the academic offerings
- A variety of new attractive and innovative open spaces that embrace and integrate the natural heritage landscape system and provides new trail links connecting the surrounding context
- A new campus presence and frontage along the entire 55 Avenue corridor
- New buildings and facilities that provide opportunities to elevate the identity, stature, and academic offerings at the KPU Tech campus, along with new industry partnerships and synergistic hospital relationships







# T.3

## Built Form Framework

The Built Form Framework for the KPU Tech campus illustrates three new building additions to the existing campus building and six additional new building sites in the Plan. The new building sites create three distinct campus destination nodes - west, central, and east. The building sites in the west campus node increase space opportunities for the existing campus structure, providing additional room for growth of the trades and technology programs. The central building node is represented by two new buildings which function as the campus hub allowing for a mix of academic, office, administrative, social, amenity, and student oriented uses. The building sites in the east node form a new and distinct innovation hub, nestled in the enhanced natural heritage landscape setting, and respond to the physical proximity of the future Surrey Hospital. These buildings provide the opportunity to locate uses that support industry-partnerships, research-partnerships and revenue generating activities, creating a strong presence and identity at the eastern gateway into the campus.

The Plan takes into account the current planning for the future Surrey Hospital which opens the door to many possible synergistic opportunities and partnerships. From an academic and work program perspective, opportunities for work synergies that are co-beneficial to both KPU Tech and the hospital should be explored. The hospital locating in this area, in combination with the presence of KPU Tech, increases the viability for transit improvements in service and frequency to the campus and the broader local community area. As a result, planning work for the Tech campus should take into consideration, and if possible coordinate with, the future hospital development across the street.

As a proactive approach, the Framework attempts to set the physical stage for future building frontages and vehicular access alignments across the street.

The following sections provide direction on the desired location, orientation, placement, character, and general height and massing of new buildings. The siting of buildings focuses on:

- Providing a frontage and address to streets
- Framing, defining, and animating open space
- Protecting sensitive functional ecosystems
- Creating distinct campus nodes



All recommendations included in this framework must be reviewed in conjunction with Sections CP.5, CP.6, CP.7 and CP.8.



LEGEND

- Existing Buildings
- Proposed Buildings
- Proposed Building Additions



Figure 3 — KPU Tech Existing Buildings, Proposed Buildings, Building Additions

### T.3.1. EXISTING AND PROPOSED BUILDINGS, BUILDING ORIENTATION AND PLACEMENT

A revitalized 55 Avenue provides the backbone for new campus development. New buildings frame the street, creating a vibrant, pedestrian-oriented streetscape. Existing buildings are expanded to create a frontage on Highway 10 and 180 Street, improving KPU's visibility and identity in the Cloverdale Town Centre.

#### ► Recommendations

- Engage with Indigenous Peoples in the design and development of new buildings on campus to integrate Indigenous design principles and representation

#### T.3.1.1 West Campus Node

##### ► Recommendations

- Orient the building additions G, H and I to front and provide main entrances onto the streets
- Building additions G and I should have entrances located at the corners of the buildings to provide direct building access from the street corner and celebrate the KPU identity
- Building addition I, along the south face of the existing building, should be oriented to provide a transparent and animated frontage to the street allowing for social gathering, generous pedestrian circulation and academic display
- Building addition H and G along Highway 10 should be transparent at-grade and have multiple at-grade access points along the street frontage with direct pathway connections from the sidewalk to the building





**Figure 4** — Building massing stepping down to provide a pedestrian-scale street front



**Figure 5** — Buildings oriented to frame open spaces with transparency at the ground level

### T.3.1.2 Central Campus Node

#### ► Recommendations

- Orient new buildings A and B to have addresses and main entrances fronting the street
- Situate building A to frame the entrance into the central makerspace and demonstration plaza
- Mass the buildings to frame and support front plazas and rear courtyard open spaces with access onto the open spaces, and provide a welcoming human-scale relationship to the spaces
- Mass the buildings, stepping the massing down if needed, to provide a respectful relationship to the adjacent low-density residential neighbourhood

### T.3.1.3 East Campus Node

#### ► Recommendations

- Orient buildings C, D, E and F to have addresses and main entrances fronting the street
- Provide a main entrance onto the street for the park pavilion building C as well as onto the recreational field open space
- Consider use of the park pavilion for formal events, teaching and learning opportunities, an area to view recreational activities and as a place for outdoor social gatherings
- Situate the buildings to frame and protect the sensitive riparian landscapes
- Create a compact form of development in each campus node, siting and orienting new buildings to maximize opportunities to create open spaces that will enhance the existing landscape and contribute to the broader campus ecosystem



LEGEND

- Frontages
- Entrances



Figure 6 — KPU Tech Building Frontages and Entrances

### T.3.2. FRONTAGES, ENTRANCES, AND TRANSPARENCY

Building frontages, the degree of transparency at-grade, and the location of entrances play a critical role in defining the campus identity and experience. They are an element of wayfinding, and provide safety and overall campus animation with multiple entrances and “eyes” on the public realm.

#### ► Recommendations

- The corner additions to the existing main building should be designed to have a distinct architectural presence to emphasize KPU’s identity and to provide a high level of transparency at grade, creating a welcoming experience for the campus community
- Directly align main door connections to sidewalks and pedestrian pathways and trails within the open space
- Provide weather protection at building entrances with roof overhangs, vestibules or other integrated architectural features
- The service sides of the buildings framing the central makerspace plaza should be articulated with windows, roll-up doors, door accesses, and landscaping to avoid a “back-door” condition
- Building C, the park pavilion building, should have primary frontages onto the street as well as onto the park open space
- The park pavilion should be transparent allowing for views to the greenspace and a maximum amount of daylight into the building
- Engage with Indigenous Peoples to design the pavilion as a distinct Indigenous architectural landmark on the campus
- Locate parking and loading entrances internal to any new building and integrate the access doors into the design of the building’s facade
- Provide ground level transparency and spaces that allow for a high degree of animation and amenity uses such as retail, social gathering, and gallery space
- Align main entrances of buildings (from one to another) creating direct paths to minimize travel distances from indoors to outdoors in inclement weather
- Avoid large blank walls or uninterrupted building masses



LEGEND

- Frontages
- Entrances



Figure 7 — KPU Tech Building Frontages and Entrances



**Figure 8** — Additional building height at prominent gateway intersections

### T.3.3. HEIGHT, SCALE, AND MASSING

Buildings and additions proposed for the KPU Tech campus are higher at the northwest and southeast corners to support a heightened expression of KPU's identity at the gateway entrances at the Highway 10 intersection as well as along 55 Avenue and to signal a sense of arrival to the campus.

#### ► Recommendations

- Provide additional building height at the prominent gateway intersections of Highway 10 and 180 Street, and 55 Avenue and 180 Street, and 184 Street and 55 Avenue to signify the entrances into the campus
- Allocate height to minimize shadow impact on the public realm and on the adjacent residential properties
- Provide mid-block pedestrian connections to break up the building mass for the addition fronting Highway 10 and for larger building footprints
- For all new building blocks, scale and mass buildings to allow for generous and useable surrounding open spaces for places to sit, study, learn, socialize, and gather around the buildings
- Allow for generous space around the buildings for landscaping, trees and site furniture
- Mass buildings to increase the amount of campus open space with terraces for roof gardens, food gardens, and useable social space



LEGEND

- Landmark Building
- View Corridor



Figure 9 — KPU Tech Views and Landmarks



**Figure 10** — Park pavilion precedent as a unique campus landmark with view into the surrounding landscape

### T.3.4. BUILDING VIEWS AND LANDMARKS

Building views on the KPU Tech campus are important to view the campus' unique landscape, provide “eyes” onto the public realm and to support a safe campus environment.

#### ► Recommendations

- Provide additional glazing and/or roll-up doors to increase views from the existing main building onto the adjacent existing and new open spaces such as the west courtyard space fronting 180 Street, south to 55 Avenue via the new building addition, and internally toward the central makerspace
- Orient and mass corner gateway buildings as the terminus to long views into the campus and along 55 Avenue
- Provide viewing opportunities from the upper storeys of the buildings within the east node to support biophilia with views to the riparian landscapes
- All gateway and corner buildings should be designed to be iconic and serve as campus landmarks for wayfinding and campus identity
- Building C, the park pavilion, should be designed as a unique campus landmark that is reflective of the natural setting
- Orient buildings to frame views into the campus open spaces from the street, trails, and from other open spaces
- Engage with Indigenous Peoples to incorporate Indigenous architectural design features as distinct campus landmarks



## LEGEND

- |  |  |
|--|--|
| <span style="color: #2E8B57;">■</span> Riparian Landscapes | <span style="color: #8B4513;">■</span> Courtyards          |
| <span style="color: #6B8E23;">■</span> Edge Landscapes     | <span style="color: #2F4F4F;">■</span> Recreational Fields |
| <span style="color: #9ACD32;">■</span> Parks and Parkettes | <span style="color: #3CB371;">■</span> Streetscapes        |
| <span style="color: #FFD700;">■</span> Plazas              |  |



**Figure 11** — KPU Tech Open Space Framework

# T.4

## Open Space Framework

The Open Space Framework for the KPU Tech campus reflects a variety of unique open spaces. The west and central campus nodes are more urban in character and are defined primarily by hardscaped landscape spaces such as the exhibition plaza and makerspace with formal courtyards and treed edge landscapes. The east campus node reflects a softscaped setting with riparian areas, a recreational field and courtyards.



All recommendations included in this framework must be reviewed in conjunction with Sections CP.5, CP.6, CP.7 and CP.8.

### T.4.1. RIPARIAN LANDSCAPES

KPU Tech's most significant landscape spaces are the riparian areas which function to channel and filter water runoff as it enters into watercourses. These landscapes are characterized by hydrophilic plants, water-saturated soil, and abundant habitat.

#### ► Recommendations

- Steward and enhance the riparian landscape areas
- Minimize environmental impact by directing pedestrians away from sensitive landscapes
- Create opportunities for Indigenous interpretation and storytelling of the riparian landscapes
- Provide additional open space around the riparian areas as buffer zones to protect these environments
- Locate interpretive signage within the landscape's buffer areas that explains the ecological and cultural significance of the natural feature and to facilitate cross-cultural knowledge-sharing



## T.4.2. EDGE LANDSCAPES

Edge landscapes refer to the open spaces that are the result of deep building setbacks from the property line at the edges of the campus. The edge landscape functions to create a significant green and welcoming face to the campus. The landscape setback includes rows of trees, generous walking zones that augment to the city sidewalk, pleasant landscaping, seating and pedestrian-scaled lighting. The spaces also provide opportunities for art.

### ► Recommendations

- Design the edge landscapes to contribute to a useable and walkable streetscapes
- Design the landscape with special landscape and paving treatments, pedestrian-scaled lighting, bike racks, and seating
- Provide a generous extended walking zone, augmenting the City's 2 meter sidewalk requirement or create parallel sidewalks
- Align the walking zone with rows of trees and landscaping to create a continuous signature greenspace and tree canopy framing the campus context
- Incorporate sustainable treatments such as rain gardens, bioswales and other Low Impact Development (LID) for stormwater management

## T.4.3. PARKS

The parkspace and pavilion are part of the elements that create a new central hub for the campus. The park is a new open space that is intended to provide a flexible and sizeable open grassed area for active or passive recreational activity such as tossing a flying disc, enjoying a picnic lunch between classes, engaging in a spontaneous ball game, or simply basking in the sun.

### ► Recommendations

- Complement lawn areas with trees and landscape plantings that provide shade and habitat to birds and pollinators
- Frame the park with trees to define the open space as a distinct place, to provide shade and shelter during inclement weather, and to increase the tree canopy on the campus
- Design for flexible use of space to accommodate a variety of uses and programs. Provide movable tables and chairs that can be left in the park or can be stacked and stored in the pavilion
- Design the pavilion as a transparent building in the park and to encourage a strong indoor-outdoor relationship and views into the park all around
- Invite programming, associated with the adjacent buildings when relevant and from the wider community, that makes intentional use of these spaces
- The park should be used as a place for outdoor learning
- Provide lighting to encourage safe 24/7 and year-round use of the space
- Incorporate pathways based on circulation desire lines in order to reduce lawn maintenance
- Plant climate-resilient plant species with preference given to species native to the ecoregion
- Where possible and relevant, install interpretive signage to describe ecological restoration activities, plant species present, and, in collaboration with local Indigenous Peoples, the cultural application of plants
- Use natural materials like wood and stone for site furniture to complement the character of the landscape

### T.4.4. PLAZAS

There are four distinct plazas in the Open Space Framework that have unique functions in the campus context. The plazas provide places to gather and socialize, to exhibit and showcase academic work, as places for demonstration and outdoor teaching and learning, and to locate permanent or temporary public art.

Notably is the makerspace plaza in the west campus node, which allows views into the trades and technology programs that give the KPU Tech campus its signature. It is the primary showcase space on campus, turning the programs inside-out. It can be a place to host campus-wide design and build events, a place for industry showcase, trades competitions, and more. An outdoor sitting stair frames the plaza and allows a place for students to passively observe the activities taking place there. It dually acts as a teaching space, creating an amphitheatre for lecture-style classes.

#### ► Recommendations

- Design with appropriate infrastructure to accommodate temporary fixtures such as event tents, band stands and staging equipment
- Design the plazas with special paving to create distinct places on campus
- Program plazas with community and campus events

#### T.4.4.1 Highway 10 Corner Plaza

#### ► Recommendations

- Design the northwest corner plaza to be a welcoming main northern entrance into the campus
- Design with special paving, trees and enhanced landscaping in keeping with the identity of KPU as a beautiful, high-quality, green, and sustainable environment
- Collaborate with Indigenous Peoples to provide Indigenous art in the plaza with a gateway presence

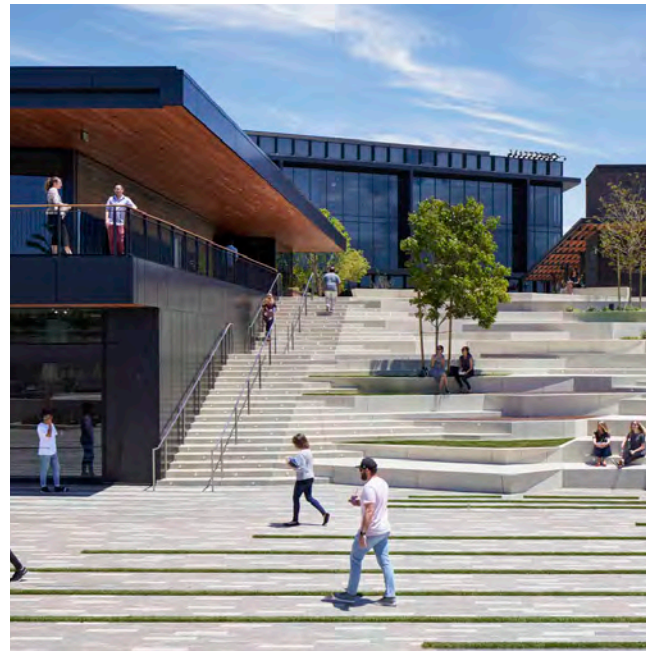


Figure 12 — Makerspace Parkette Amphitheatre Precedent

#### T.4.4.2 Makerspace Plaza and Amphitheatre Parkette

#### ► Recommendations

- Design the plaza to continue to function as the service and loading area for the west campus node buildings
- Time servicing (early morning and late evening) to reduce vehicular and pedestrian conflict
- Integrate the servicing and loading internally for the new building expansions along Highway 10
- Enhance the plaza as a flexible quality working, outdoor teaching, and demonstration space. Use high-quality paving to distinguish the area as a pedestrian-priority zone.
- Enhance the existing buildings to provide a quality frontage onto the plaza. Incorporate a high degree of transparency into the façades with elements such as glass or garage-door style openings to enable a seamless indoor-outdoor relationship to the plaza



- Leverage the grade difference and sun exposure in the rear of the plaza space to integrate an outdoor amphitheatre, parkette and open pavilion to observe the plaza activity
- Provide direct pedestrian access to the amphitheatre parkette via Highway 10 and as an opportunity to welcome the community in to partake in the plaza activity or to enjoy a walk through the campus landscape
- Integrate lighting into the plaza, amphitheatre step-seating, and parkette to aid in wayfinding and campus safety
- Consider demarcating the servicing drive-aisle with collapsible bollards that allow for flexible and shared plaza usage

#### T.4.4.3 55 Avenue West Gateway Plaza

##### ► Recommendations

- Design the plaza to extend from the gateway corner of 180 Street to run along the entire front of the new south building addition
- Design the linear plaza as a flexible exhibition space to showcase student work that can be visible from the street
- Design to accommodate seating for passive recreation and enjoyment of a sunny south facing exposure
- Engage Indigenous Peoples to locate Indigenous art at the gateway entry and art within the length of the plaza



**Figure 13** — Makerspace Plaza Precedent

#### T.4.4.4 The Central Plaza

##### ► Recommendations

- Design the plaza as an outdoor social and amenity spill-out space for the adjacent building
- Consider fronting the plaza with retail uses such as a cafe or social space to animate the space
- Design to accommodate permanent or temporary displays to showcase student projects and collaborate with Indigenous Peoples to include Indigenous art
- Design to accommodate flexible use of the space for social gathering, events, passive recreation, and exhibition
- Enhance the Central Plaza with trees to frame and define its edges all around, and to provide shade and shelter during use
- Provide movable furniture such as tables and chairs for spontaneous and flexible use of the plaza
- Avoid permanent furnishings and structures within the open plaza area to maintain flexibility of use

### T.4.5. COURTYARDS

The courtyard spaces are located within the east campus node and provide more urban intimate social spaces within the heart of a treed landscape context. The courtyards function as exterior outdoor gathering, socializing and at times, passive recreational spaces for the adjacent buildings. Courtyards can be hard and/or softscaped in materiality and character.

#### ► Recommendations

- Design the courtyards for the east campus node as the primary gathering spaces by providing fixed seating as well as movable tables and chairs for flexible use of space, lighting for evening use, and landscaping consistent with the surrounding environment
- Provide multiple connections onto the courtyard space with direct links to building doorways, to the sidewalk, and to the trail system
- Provide views into the courtyard from fronting buildings
- Create a high level of building transparency at-grade to create safe animated courtyard spaces
- Collaborate with Indigenous Peoples to provide opportunities to locate art or water features as beautifying and animating elements within the courtyards

### T.4.6. CAMPUS STREETSCAPES

55 Avenue is a very significant street for the KPU Tech campus. It is intended to function as the spine that fosters a seamless, accessible, and complementary relationship between the KPU properties and the new Surrey Hospital and Cancer Centre. It is also intended to be a sinuous



**Figure 14** — Streetscapes Precedent

pedestrian and cycle-friendly green parkway through the campus.

#### ► Recommendations

- Incorporate the City's initiative to create a pedestrian and cycle-friendly street with slower traffic speeds, bike lanes, generous sidewalks, weather protection, enhanced paving and landscaping, and street trees
- Encourage the City to incorporate raised pedestrian crossings at the intersection of 180 Street and 55 Avenue with special paving treatments
- Work with the City to incorporate KPU banners, special lighting, public art and signage

### T.4.7. ART OPPORTUNITIES








Opportunities for public art should be a key component of public realm design.

#### ► Recommendations

- Design a "public art walk" in the linear plaza fronting the new addition to the KPU Tech Main Building



## LEGEND

- |   |                           |   |                          |
|---|---------------------------|---|--------------------------|
|  | BC Highway 10 (56 Avenue) |  | Primary Gateway          |
|  | City Road                 |  | Vehicular Access/Egress  |
|  | Primary Campus Street     |  | Pedestrian Access/Egress |
|  | Service Lane              |   |                          |



**Figure 15** — KPU Tech Street Hierarchy

# T.5

## Movement Framework

The Movement Framework provides a multi-modal network for the KPU Tech campus. Here, 55 Avenue functions as the spine for the campus and the future Surrey Hospital and Cancer Centre, accommodating all modes of transportation. The Framework proposes an enhanced transit scenario and advocates for bike lanes along all of the city streets that access the campus. In addition, the Plan in alignment with the City's Cloverdale Town Centre Plan for 55 Avenue includes the implementation of bike lanes along the corridor.

Similar to the other KPU Campus Plans, this campus is envisioned as a pedestrian priority campus with a fine-grained pedestrian circulation network throughout that connects to existing and new buildings and open spaces, and to the trails and cycling network. Parking is transitioned below-grade in new building developments, or is provided on-street along 55 Avenue and in small pocket parking areas adjacent to some of the new buildings. In addition, there are three key gateway access points into the campus, one at the corner of 56 Avenue and 180 Street, and the others are at the 180 Street and 184 Street intersections along 55 Avenue.

The new hospital represents a significant opportunity to find synergies between the two sites. From a transportation perspective, these development areas represent a major opportunity to leverage better transit service, active transportation links, strategic parking initiatives and many other concepts to improve overall outcomes for the many new students and employees that will travel to and from this area everyday in the future.

The following sections provide more detail on how campus design features relate to the Movement Framework, as well as consideration of each travel mode on- and off-campus.



All recommendations included in this framework must be reviewed in conjunction with Sections CP.5, CP.6, CP.7 and CP.8.



# LEGEND

-  Transit Route & Stop
-  Campus Cycling Route
-  KPU Shuttle Stop
-  Recommended Transit Route & Stop
-  Pedestrian Circulation



Figure 16 — KPU Tech Transit, Cycling and Gateways

### T.5.1. CAMPUS GATEWAYS

The campus gateways offer an important opportunity to build campus identity as significant and memorable entry moments into the campus.

Given the nodal nature of the campus, the changes in topography on approach to the campus from Highway 10, and the BC Hydro corridor easement along 184 Street, the design of the gateways at each location has to provide a high level of visibility and presence at the intersections.

#### ► Recommendations

- Design the gateway entrances as memorable destinations by integrating signature plaza open spaces and iconic buildings that represent KPU identity
- Provide greater building height and presence along 184 Street and a notable functional landscape design at the intersection to be visible beyond the BC Hydro corridor buffer
- Design the gateways to provide clear signage and wayfinding of the campus and into the campus
- Design to provide clarity in the modes of movement that can access the campus at the gateway points

### T.5.2. PEDESTRIAN CIRCULATION

The Plan for the KPU Tech campus prioritizes pedestrian circulation on campus, reflecting a fine-grained network that connects the three campus nodes, and connects buildings to open spaces and to the surrounding community. The walking experience on campus is prioritized throughout the seasons.

#### ► Recommendations

- Provide a comfortable high-quality, attractive and accessible public realm with multiple building access points, areas to shelter, and short distances between building clusters
- Concentrate academic programs within the west and central nodes to minimize walking distances to classes and amenities in inclement weather
- The design of the streetscape must be of high-quality design with safe, and generous walking zones, trees, lighting and furnishings to encourage the campus community to walk from campus end-to-end
- Provide direct walking routes to buildings to manage time efficiency in getting to classes
- Provide weather protection through building and landscape design to improve pedestrian comfort and to make the outdoor walking experience attractive
- Prioritize universal accessibility throughout the campus to ensure people of all ages and abilities can move freely through the site
- Provide connectivity to and through the surrounding community and within the eastern park landscapes with trail alignments and pathway materials that are sensitive to the unique landscape environment



- Highway 10 (A) 10m Building Setback
- KPU 55 Ave (B) R.O.W 24.0m West
- KPU 55 Ave (C) R.O.W 24.0M East



**Figure 17** — KPU Tech Road Typologies

### T.5.3. TRANSIT

Three transit stops are located in the northwest area of the campus, two along Highway 10, and one along 180 Street. The Movement Framework recommends a new route along 55 Avenue and transit stops along 55 Avenue and 184 Street to make transit more accessible to the new campus developments.

#### ► Recommendations

- Work with the City to improve transit service frequency to the campus along Highway 10 and 180 Street
- Advocate for a transit route along 55 Avenue with a transit stop and appropriate transit stop amenities (shelters, information signage, etc.) midway along 55 Avenue in proximity to the Central Plaza, and another close to the 184 Street and 55 Avenue intersection
- Create internal waiting areas or vestibules within new buildings close to transit stops
- Work with TransLink and the City of Surrey to locate a future transit stop along 184 Street in anticipation of the future Surrey Langley SkyTrain extension along the Fraser Highway to the north
- Accommodate a universally accessible location for the KPU Shuttle's stop

### T.5.4. BICYCLE CIRCULATION AND AMENITIES

The bike circulation network responds to KPU's sustainability strategies and suggests a robust network for the campus area considering future development of the hospital. The Plan recommends future discussions with the City and Fraser Health to promote a pedestrian and cycling-oriented environment for both campus, hospital and local community users.

#### ► Recommendations

- Advocate for bike lanes along all streets surrounding the campus to encourage cycling as a safe mode of transportation to and from campus
- Provide high-quality bike storage areas and amenities along the bike routes that are safe and secure for all users
- Provide e-bike charging stations throughout the campus and especially along bike routes
- Consider a bike share program for students and employees on campus for recreational and short trip needs





**Figure 18** — Weather protected bike parking



**Figure 19** — Weather protected bike parking with sustainability features



**Figure 20** — Weather protected bus shelter

## T.5.5. VEHICULAR CIRCULATION

Vehicular circulation on campus is concentrated along 55 Avenue, which functions as the connector to vehicular access points into the campus to below grade or pocket surface parking access points. The only other vehicular circulation on campus is to the service access to the makerspace plaza to service the existing and new buildings that frame the plaza.

### T.5.5.1 55 Avenue

#### ► Recommendations

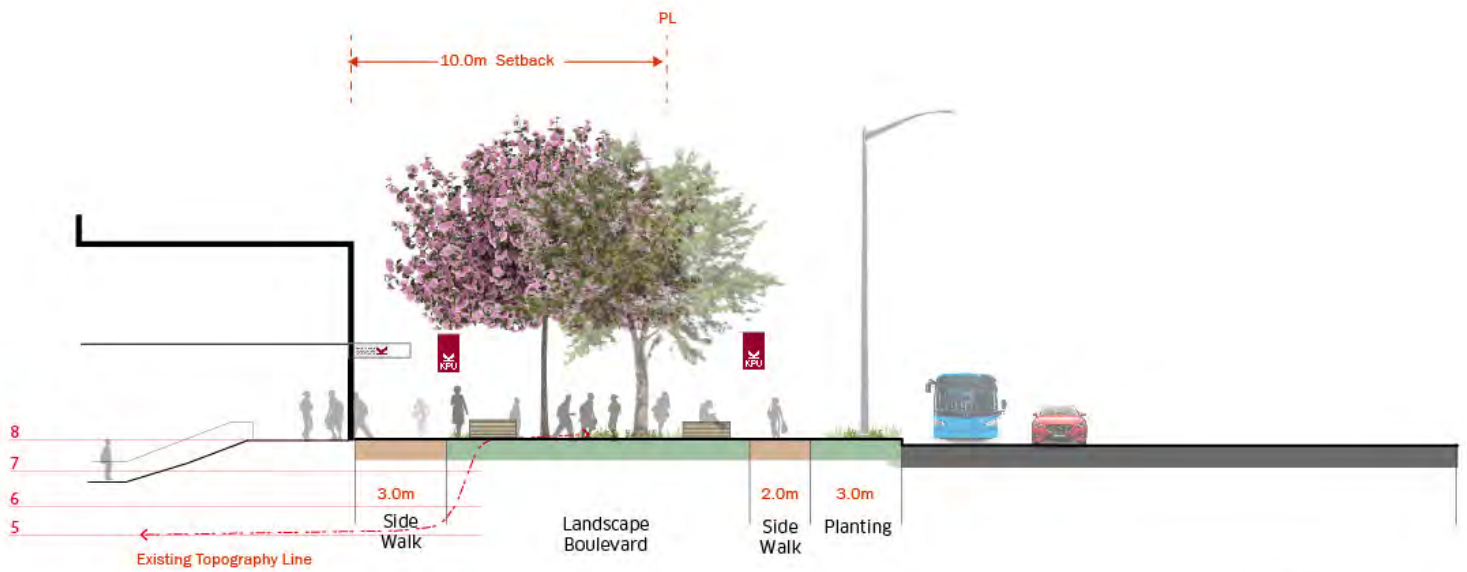
- Work with the City to create a pedestrian-oriented street with low speeds to allow for safe pedestrian circulation
- Advocate for additional signalized pedestrian crossings and crosswalks as needed based on the increased traffic volumes that will result from the future hospital development
- Work with the City to provide high quality special paving, landscape design, and street furnishings
- Work with Fraser Health to align access/egress connections and to encourage the location of surface parking to the side or rear of the new hospital building

### T.5.5.2 Highway 10, 180 and 184 Streets

#### ► Recommendations

- Due to the higher volumes and design speed of Highway 10, 180 Street, and 184 Street, high-quality walking pathways and separated cycling facilities should be integrated into the design of each streetscape. Furthermore, bus priority measures (e.g. bus lanes, signal priority) and bus stop amenities (e.g. shelters) should be incorporated where possible





**Figure 21** — Highway 10

### T.5.5.3 Street Hierarchy

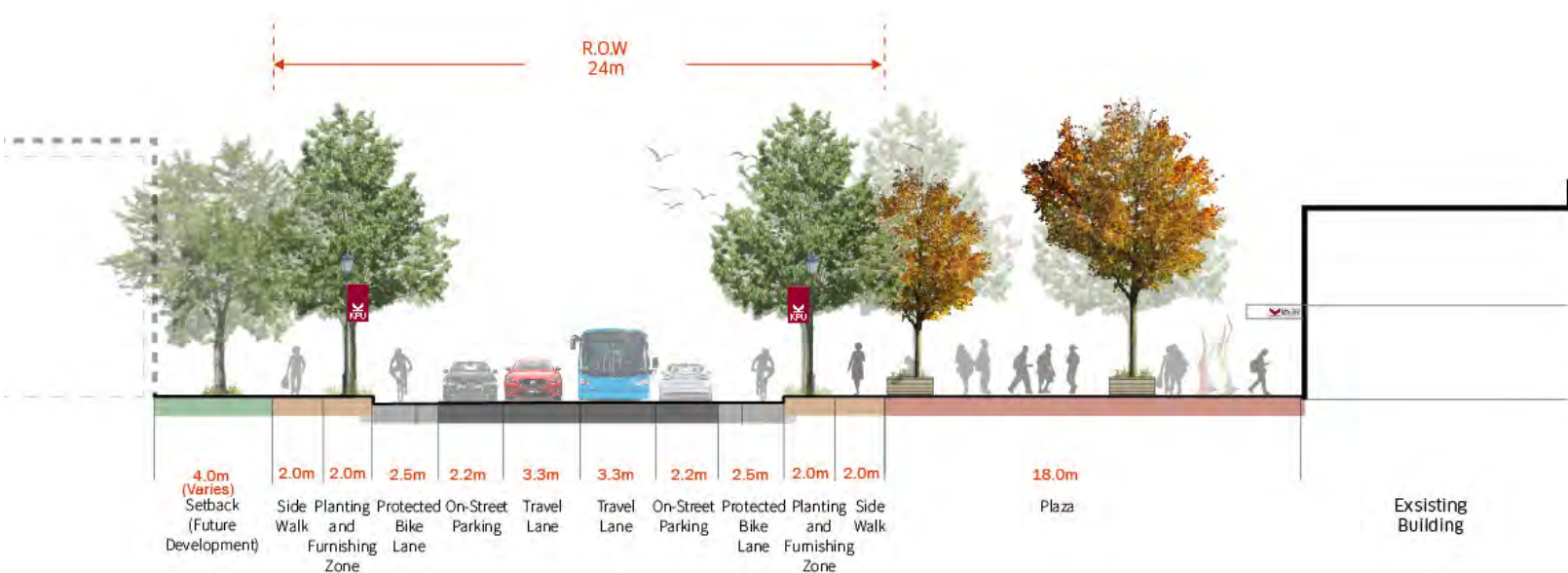
The following are illustrations of the recommended cross-section and characteristic elements of the vehicular movement corridors on campus. Refer to Figures 18, 19 and 20.

### Highway 10

#### ► Recommendations

Provide a 10.0m building setback from the Right-of-Way which allows for:

- A 7.0m enhanced pedestrian promenade and landscape zone with seating, street trees, landscaping, pedestrian-scale lighting, special paving and, KPU signage
- A 3.0m walking zone adjacent to the building to connect at-grade to all new building entrances



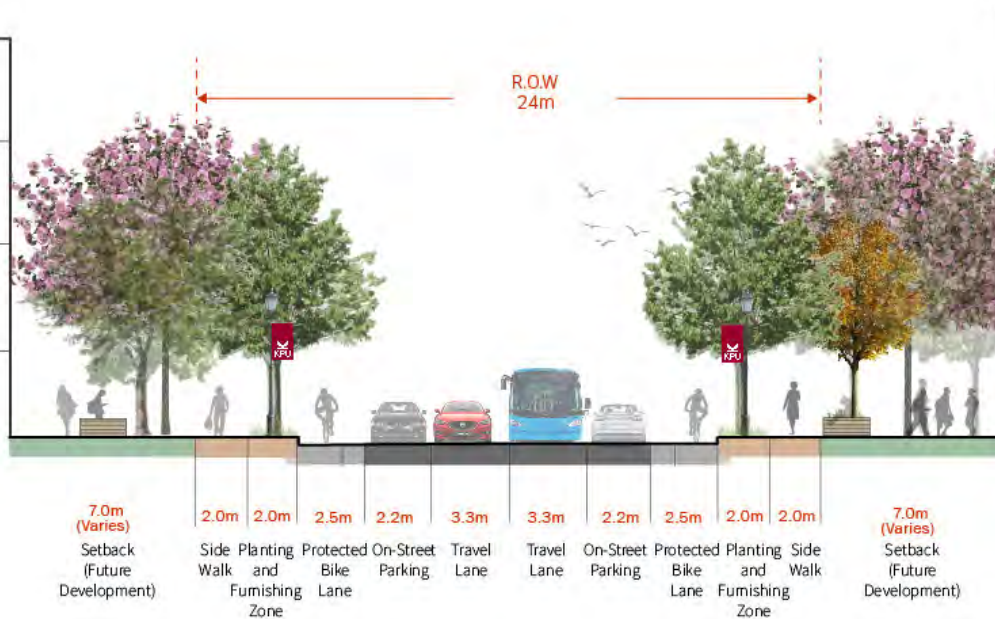
**Figure 22 — KPU 55 Ave West**

## KPU 55 Avenue (B): West Street

### ► Recommendations

- Allocate a 24.0m Right-of-Way
- Provide two 3.3m travel lanes in either direction
- Provide 2.2m on-street parking on both sides of the street
- Provide 2.5m dedicated cycle tracks on either side of the street
- Provide 2.0m furnishing and planting zones on both sides of the street to allow for street tree planting, landscaping, lighting, signage, garbage receptacles, and bike parking
- Provide a 2.0m walking zone on both sides of the street
- Provide approximately 18.0m (varies) for a building setback on the north side of the street to allow for a pedestrian promenade fronting the campus buildings to accommodate seating, special paving and pedestrian-scaled lighting, art, event space, academic display, and enhanced landscaping





**Figure 23** — KPU 55 Ave East

### KPU 55 Avenue (C): East Street

#### ► Recommendations

- Allocate a 24.0m Right-of-Way
- Provide two 3.3m travel lanes in either direction
- Provide 2.2m on-street parking on both sides of the street
- Provide 2.5m dedicated cycle tracks on either side of the street
- Provide 2.0m furnishing and planting zones on both sides of the street to allow for street tree planting, landscaping, lighting, signage, garbage receptacles, and bike parking
- Provide a 2.0m walking zone on both sides of the street
- Provide approximately 7.0m (varies) for a building setback on both sides of the street to allow for enhanced landscaping fronting the campus buildings with seating, art, street trees and pedestrian-scaled lighting

### T.5.6. PARKING

In the long term vision for the campus, the majority of parking is envisioned below grade as part of each new building site development. Opportunities for structured parking can be located in new buildings but with animated frontages to address the public realm and streets.

#### ► Recommendations

- Provide structured or below-grade parking as part of new developments in order to maximize ground plane for better uses
- Include electric vehicle charging infrastructure, along with spaces for carpool and car share vehicles
- When necessary, provide short-term on-street parking on 55 Avenue and internal access streets to accommodate pick-up and drop-off activities
- Consider a partnership with Fraser Health authority on a potential shared parking scenarios that minimize the required supply of overall parking spaces within the vicinity of these two major sites
- Parking infrastructure should be rolled out incrementally to respond to changes in vehicular ownership models
- Plan for the eventual introduction of autonomous and connected vehicles and accommodating the required infrastructure

### T.5.7. LOADING AND SERVICING

Loading and servicing on the KPU Tech campus reflects a decentralized system of service. All new buildings will be designed to manage their own loading and servicing. Existing north-west campus buildings will be serviced by an enhanced shipping and receiving facility in the new development fronting 56 Avenue.

#### ► Recommendations

- Decentralize loading areas for new-build areas of the campus, especially for the eastern node
- Provide loading at-grade, retaining underground levels for vehicle parking requirements
- Vehicular circulation and access in the campus makerspace plaza will be limited to service and loading, and service parking only



LEGEND

- On-Street Parking
- Below-Grade or Integrated Parking

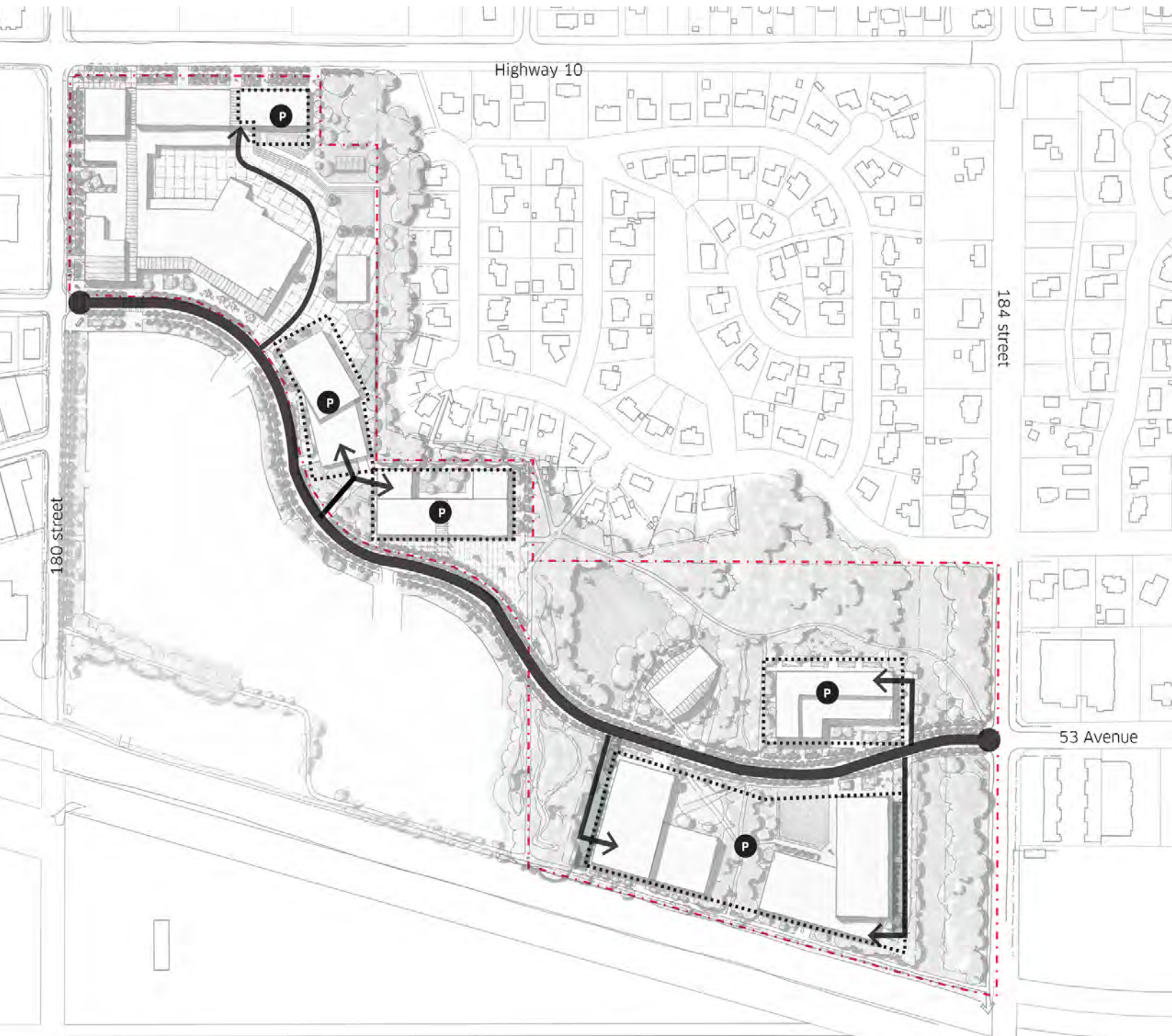


Figure 24 — KPU Tech Campus Parking

### T.5.8. WAYFINDING AND SIGNAGE

Wayfinding is especially important because of the nodal nature of the KPU Tech campus. 55 Avenue and pedestrian paths are the means of connecting the campus west to east. As such, in addition to signage, a wayfinding strategy must consider landmark buildings and their orientation and placement, distinct open spaces and landscape features, the location of art and architectural form, and clear view corridors through the campus to achieve intuitive orientation. A wayfinding strategy is an important intervention in assisting the first time visitor and potential student to the campus, as well as the novice campus user who eventually becomes accustomed to the campus over time. It is also extremely important to guide the various modes of movement through a nodal campus with multiple “front doors.”

#### ► Recommendations

- Provide intuitive wayfinding through building and landscape design to reduce the need for excessive signage
- Identify the different campus nodes with distinct treatments such as architectural form, colour, Indigenous identification or design interventions, and identifiable signage treatments
- Engage Indigenous Peoples to participate in a wayfinding strategy for the campus. For example, each campus node can be identified with a hənq̓əmin̓əḿ place name, colour, architectural or landscape feature, or specific design
- Create a cohesive interior and exterior signage design language that builds identity for KPU but also incorporates the uniqueness of the KPU Tech campus and its three distinct campus nodes
- Use technology such as mapping apps to locate buildings and orient users
- In response to health and wellbeing, provide signage interventions for pathways and trails that respond to tracking walking and cycling distances
- Use a wayfinding system that is consistent across all campuses which clearly identifies active transportation amenities such as bike racks, end-of-trip facilities, etc.
- Ensure that any wayfinding signage is appropriately lit, and that designated routes have sufficient lighting for all times of day
- Use signage and wayfinding as part of the experiential learning experiencing, integrating information on the different landscape ecologies on the campus such as the distinct riparian landscapes
- Integrate Indigenous teaching and the hənq̓əmin̓əḿ language in the signage and wayfinding strategy to educate on the history of the land



