5.0 Introduction

This section summarizes the performance criteria used to evaluate and prioritize the proposed improvements to the stations and station area outlined in the previous chapter. The criteria reflect the overall Transit Village goals for improving transit ridership, neighbourhood liveability and village identity, and the long term performance of the Broadway/Commercial station area. They also provide a basis for ranking each improvement according to the level of benefit versus cost and for understanding the trade-offs of prioritizing one improvement over another.

Added to the performance criteria are two important considerations that bear on the assessment of proposed improvements - those of cost and timing. Because the variety and volume of needed improvements outweigh available funding at this time, a key challenge is to allocate available funds to maximize immediate benefits - to transit users, operations, pedestrians, cyclists, and the community at large - while at the same time supporting future station expansion and adjacent parcel redevelopment. This requires that near and medium term improvements do not preclude; a) longer term station expansion as a result of long term system growth, and b) adjacent property development.

5.1 Community Integration

Transit Villages are dense urban communities well served by transit and high quality train systems. They combine vibrant streets and sidewalks, places to shop, work and live, with convenient access to transit. Transit Villages have active, vibrant, and strong neighborhood centers focused around transit. They need to provide amenity to residents of the community in which they are located in addition to serving those using transit through the community.

In addition to facilitating the transfer of passengers, the immediate station environment should provide for pedestrian, bicycle and vehicular access to major transit facilities as well as providing a hub for community and commercial activity.

5.2 Safety & Security

Real and perceived feelings of safety and security are extremely important in interchange design. Moving between modes or services can leave passengers feeling vulnerable, particularly if the interchange is at night or times when few people are around, if the distance is long, poorly lit or lacking appropriate surveillance.

5.3 Transit Capacity

The Broadway/Commercial transit interchange is the most important single transfer point in the Greater Vancouver region. It is not just a rail-rail transfer point within the SkyTrain system, but also the connection point between SkyTrain and the region's busiest bus corridor, the 99 B-Line service extending west along Broadway to UBC. The interchange is also situated at the geographic centre of the region's transportation system, with a large portion of the region accessible within a 30 minute period. The role as a transfer point also means that many points are accessible with one transfer.

Background ridership growth will soon exceed platform and passerelle capacity at Broadway Station, and the extension of the Millennium Line will nearly triple transfers here.

5.4 Station & Urban Design

Broadway/Commercial Station and its surrounding neighbourhoods are among the most important places in the Vancouver region and represent one of the region's best potential investments for improvements to the public realm. Four main issues were identified in the site assessment; existing and projected passenger crowding; improve passenger wayfinding; improve pedestrian quality of service and overall urban environment, and; upgrade overall design, materials and attention to detail.

5.5 Pedestrian & Cycling Links

Broadway/Commercial Station is a key intersection in the linking of important pedestrian and cycling routes in the region. A significant east-west cycling route exists along 10th Avenue that sees users accessing Broadway Station from the south by passing through the adjacent lane. A greenway exists below the guideway south of the station that currently terminates at 12th Avenue. The proposed community gardens by MOBY will strengthen the station's connection with this greenway. Further, the Central Valley Greenway is a pedestrian and cycling path that connects downtown Vancouver with New Westminster. It passes just north of Commercial Station and is a convenient link to transit. Design responses should strengthen connections between these routes and establish the station as a premier multi-modal hub in the city and region.

6.1 Summary of Public Process

Extensive public consultation on the potential improvements was undertaken over the summer and fall of 2005. Two meetings were held with groups of local stakeholders and staff also met individually with key stakeholders. These meetings were opportunities to elicit feedback on the list of priorities for the transit village and to hear future plans, and ideas of local business owners and community representatives. Open houses were held on October 1 and October 6 - the first in a local community centre and the second in the concourse levels of Broadway and Commercial Drive Stations. The open houses attracted over 300 local residents and transit users.

Considerable positive feedback and support was generated through the stakeholder and public consultation. While feedback was notably different among stakeholder groups (transit users, homeowners, residents, businesses), all groups recognized the pressing need to improve safety and security around Broadway Station, and to create a stronger physical link between the two stations. Other areas of emphasis included increasing pedestrian and passenger amenities within and around the stations, better weather protection, and improving the quality of the public realm throughout the station precinct, but particularly to the west of Broadway Station. Elements such as public art, distinct wayfinding and signage, and a consistent design treatment throughout both stations were also high priorities. An additional issue highlighted was the need for public toilets, either within or in close proximity to the stations.

The matrix at right summarizes the list of potential improvements with the evaluation criteria. Assigned to each improvement is an order of magnitude cost - ranging from $100,000 to $2,000,000.

6.2 Near Term Potential Improvements

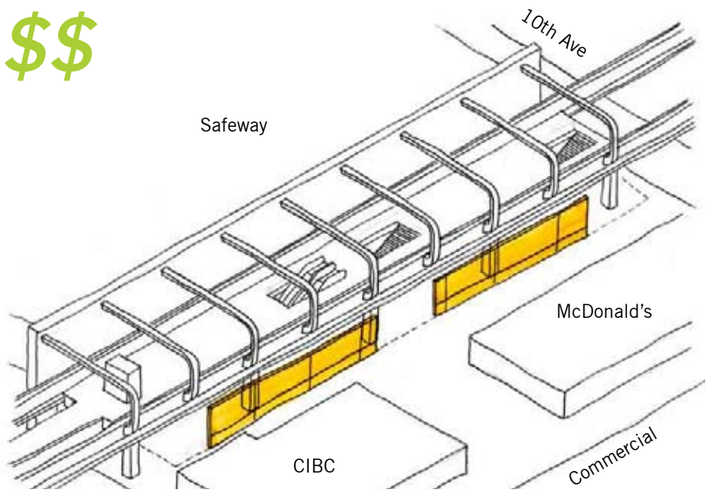
		Key Benefits					
		Community Integration	Safety	Capacity Improvements (User Comfort & Ease of Movement)	Design Improvements	Pedestrian & Cycling Links	Cost
1.0	**BROADWAY STATION UPGRADES**						
1.1	Replace metal screens and construct new dumpster enclosure		●		●		$$
1.2	Relocate elevator to south end of station			●	●		$$
1.3	Open a new 10th Ave entrance to the south with a new circulation stair	●	●	●		●	$$
1.4	Create a new bicycle storage facility (Bike Station)	●	●	●		●	$
1.5	Remove 2 bays of east station wall at platform level				●		$
1.6	Cover the underside of the passerelle	●			●	●	$$$
1.7	Widen existing passerelle			●			$$$
1.8a	Upgrade existing roof with skylights to encourage daylighting				●		$$
1.8b	Replace existing roof structure with new canopy design	●			●		$$$
1.9	Improve area wayfinding, signage and lighting	●	●	●	●	●	$$
1.10	Community Safety Office	●	●				$
2.0	**COMMERCIAL STATION UPGRADES**						
2.1	Potential new connection to Commercial Bridge	●	●	●		●	$$$
2.2	Widen Commercial Bridge sidewalk to accommodate 99 B-Line passenger flows	●	●	●			$$$
2.3	Widen station platform bridge width to address crowding			●	●	●	$$$
2.4	Improve Commercial Station plaza	●	●		●	●	$
3.0	**99 B-LINE BUS STOP UPGRADES**						
	DROP-OFF						
3.1	Provide weather protection, passenger information and wayfinding	●			●	●	$$
	PICK-UP						
3.2	Improve plaza area to accommodate peak queues			●	●	●	$$
3.3	Provide consistent design treatment (ie. paving)	●		●	●	●	$
4.0	**#9, #20 BUS STOP UPGRADES**						
4.1	Provide sufficient shelter to accommodate most of peak queuing, integrated into adjacent building architecture	●		●		●	$$
5.0	**SURROUNDING NEIGHBOURHOOD**						
5.1	Design the pedestrian crossing on the east side of Commercial Drive to accommodate heavy pedestrian volumes and address desire lines to station entrances and bus stops.	●	●	●		●	$$$

Cost Key

< $100,000	$
$100,001 - $500,000	$$
$500,001 - $2,000,000	$$$

1.1 Replace Metal Screens

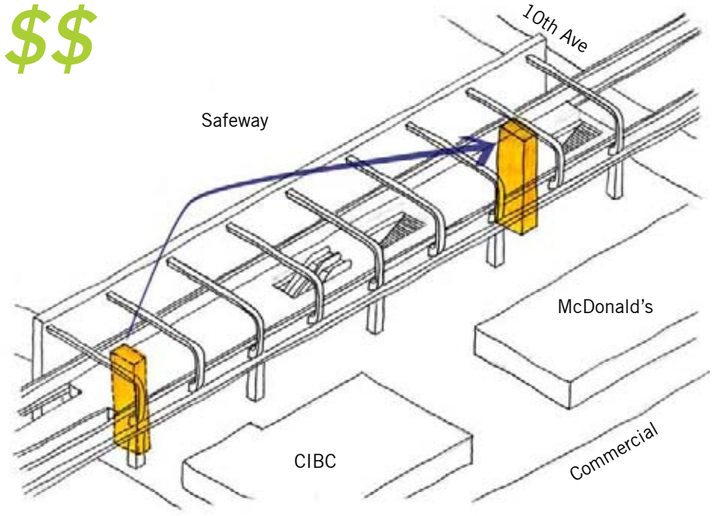
$$



The west elevation of Broadway Station is comprised of perforated metal screens to the north and chain-link fence to the south. Both finishes need replacement to improve the pedestrian character of the alley and enhance the quality of the space inside the station. The construction of an integrated storage area for dumpsters could be incorporated into the design of the new highly transparent facade.

1.2 Relocate Elevator

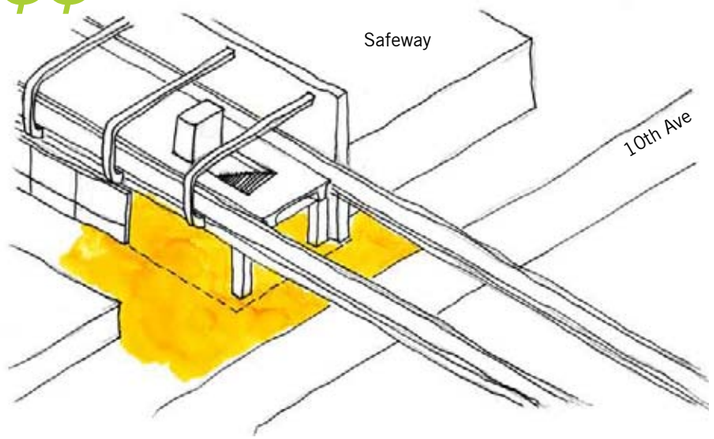
$$



The current location of the elevator within Broadway Station is a bottleneck at platform level that severely limits the transfer carrying capacity of the passerelle. Further, at street level the elevator is a significant visual barrier to the north entrance. It is proposed to relocate the elevator to the south end of the station to address both of these issues.

1.3 10th Avenue Entrance

$$



Currently, SkyTrain riders approaching the station from the south are either forced to walk up Commercial to Broadway then into the station, or to take a shortcut through the alley behind CIBC and McDonald's. In both cases riders must backtrack once they enter the station to reach the escalators. To address this, a new station entrance at 10th Avenue could be introduced, along with a new circulation stair, making SkyTrain more accessible to the community and simultaneously improving the character of the 10th Avenue streetscape. The development of the MOBY project to the south of the station provides another strong argument for a south entrance as the station would then directly engage the neighbourhood.

1.4 Bicycle Storage Facility

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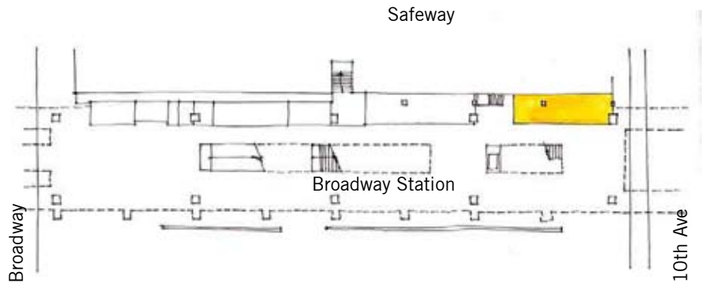
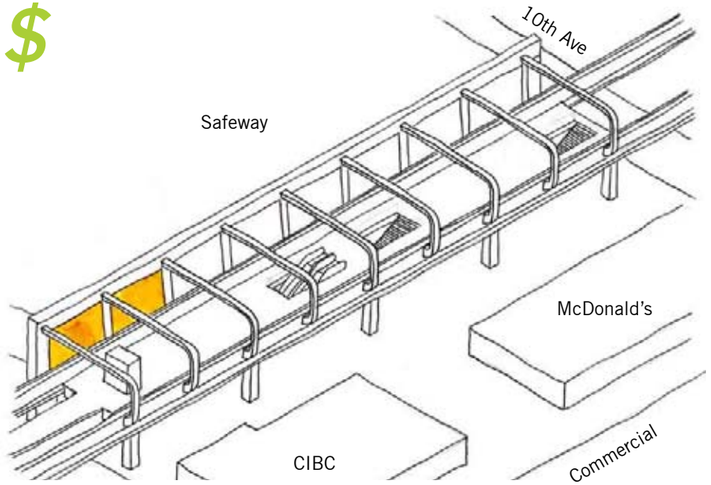


Despite Broadway/Commercial's close proximity to both the 10th Avenue Bikeway and Central Valley Greenway, the station does not reach out to these corridors. A small number of bicycle parking facilities are currently provided but they are not secured and commuters with valuable bicycles are not utilizing them. One solution could be to provide a staffed bicycle storage facility, or Bike Station, in which cyclists can securely store their bikes while commuting. The staff member has the added effect of providing surveillance at the south end of the station by her presence alone. This intervention will work best when combined with 1.3: 10th Ave Entrance.

1.5 Platform Visibility

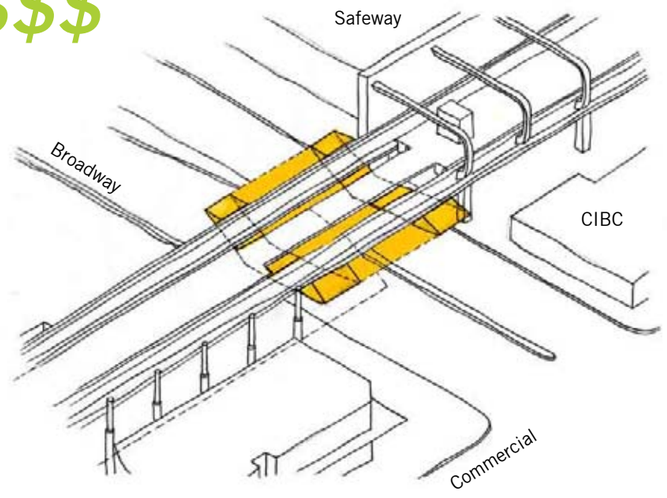
$



The potential exists for a fantastic view of the North Shore mountains from the platform level of Broadway Station. Unfortunately, a concrete block wall installed to carry the load from the station's hoop trusses obscures this view. Removing 2 bays of this block wall would open up the view to the mountains while still maintaining the load bearing capacity of the piers that support the roof.

1.6 Underside of Passerelle

$$$



The underside of the passerelle and guideway where they cross Broadway are a haven for nuisance pigeons and provide poor weather protection. A ceiling structure could be introduced over the sidewalks on both sides of the street to mitigate the pigeon problem and provide continuous rain protection.

Further, when entering the neighbourhood via automobile the existing passerelle and guideway structure do not present a welcoming face to the neighbourhood. An extension of the proposed ceiling structure could span the entire underside of the passerelle, from one side of Broadway to the other, creating a much more inviting gateway to the community.

1.7 Widen Existing Passerelle

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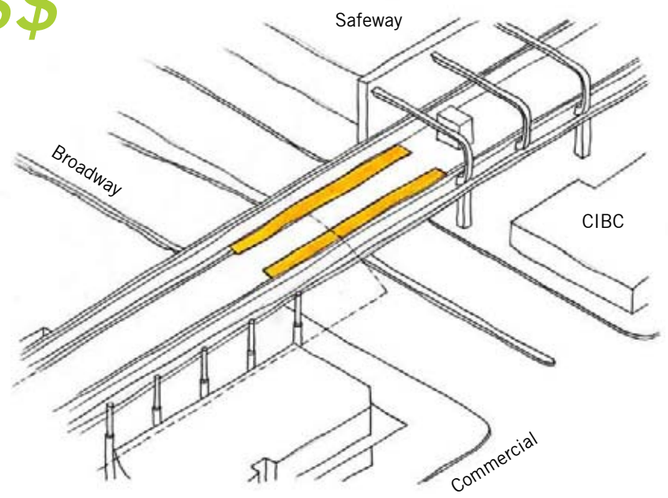
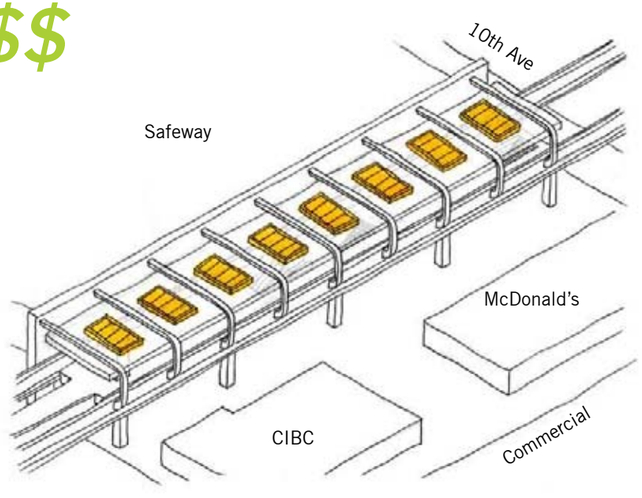


The passerelle connecting Broadway Station with Commercial Station is the choke point for riders transferring to and from Broadway Station. Therefore, the passerelle could be widened to service more pedestrian traffic. The structure of the passerelle is sufficiently strong to accommodate greater width so the existing glazed walls could be shifted laterally and reused in the new configuration.

1.8a Daylighting the Platform

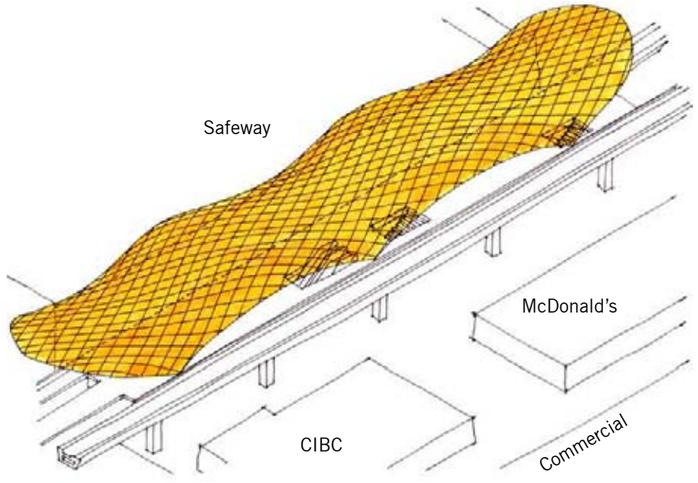
$$



The platform level of Broadway Station is very dark in its' current iteration. Skylights could be introduced to the existing roof system to encourage daylighting of the space.

1.8b Replace Existing Roof

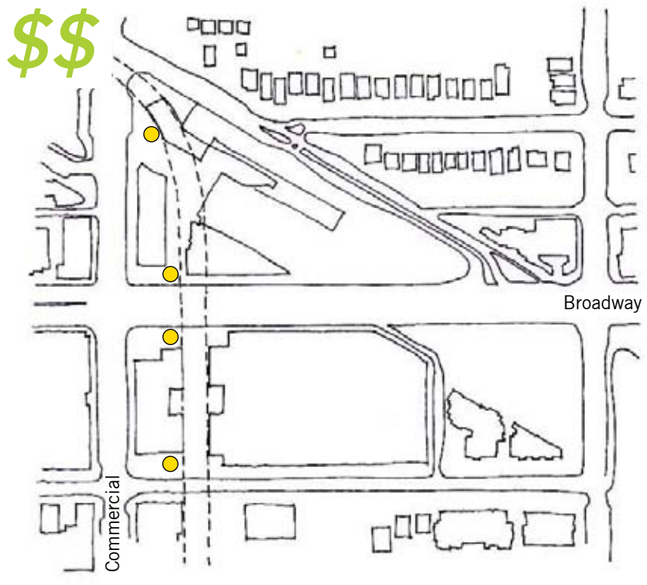
$$$

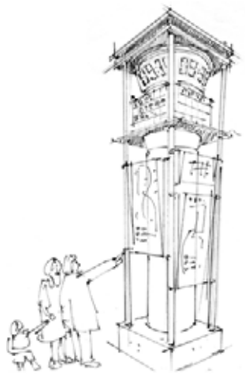


An opportunity exists to use a Broadway Station roof/canopy element to delineate a gateway to the community. Practically, the iconic quality of the roof would begin to consolidate the two stations into one cohesive transit hub. This intervention would require the removal of the existing hoop trusses which have become dated.

1.9 Improve Wayfinding & Signage

$$





The ability of a passenger to easily find their way from one mode of transit to another is the most critical part of designing good interchanges. The most successful methods of promoting wayfinding is to use signage, design elements and by siting mode stations along direct lines of site to create coherent connections along public spaces. At Broadway/Commercial the introduction of information pylons at key points throughout the two stations could define a cohesive environment and give riders information about the timing and frequency of transit schedules. These elements could also combine with public art.

1.10 Community Safety Office

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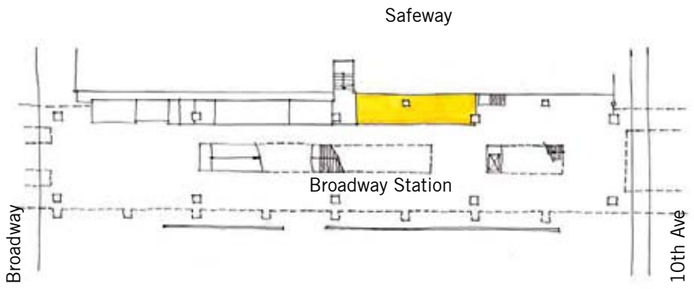
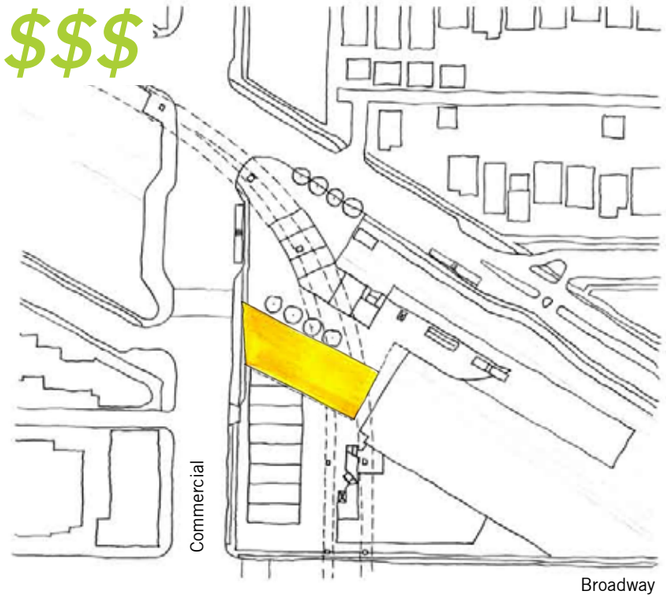


Safety and security are extremely important in transit village design. Moving between modes can leave passengers feeling vulnerable, particularly when few people are around. Currently, under utilized areas surrounding Broadway/ Commercial Station, such as the alley to the west of Broadway Station, are locations for criminal activity. This is at least partially due to a lack of proper surveillance in the immediate station vicinity. A Community Safety Office could be introduced into Broadway Station to provide a home base for security in and around the station.

2.1 Commercial Bridge Connection

$$$

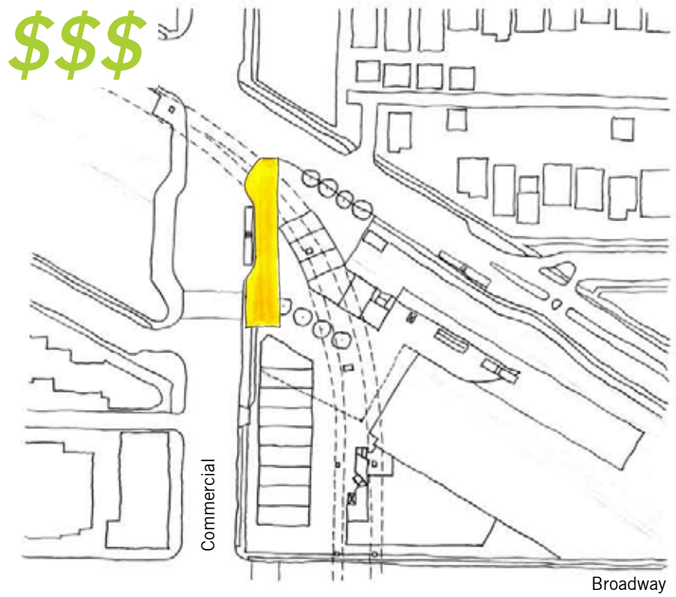


The existing covered pedestrian corridor linking Commercial Drive with Commercial Station is a dark, narrow and overcrowded passage that has the feel of a back entrance. The pulse of passengers aligthing from the 99 B-Line heading to Commercial Station strain the capacity of this passage. The passage could be widened to accommodate greater pedestrian volumes much more comfortably. Further, the canopy structure would be redesigned to introduce more daylighting making the space more welcoming.

As part of a much larger development scenario, a new plaza would be built over The Cut connecting Commercial Drive to the Commercial Station bridge and Grandview Highway North.

2.2 Widen Commercial Bridge Sidewalk

$$$



The sidewalk on the east side of Commercial Drive Bridge is also the alighting zone for the 99 B-Line and #9 trolley buses arriving from the west. For this purpose it is much too narrow, to the point that sidewalk congestion can slow the process of alighting. A new widened sidewalk design should also recognize the heavy volumes of customers walking south from the alighting points to enter the station.

2.3 Expand Platform Bridge

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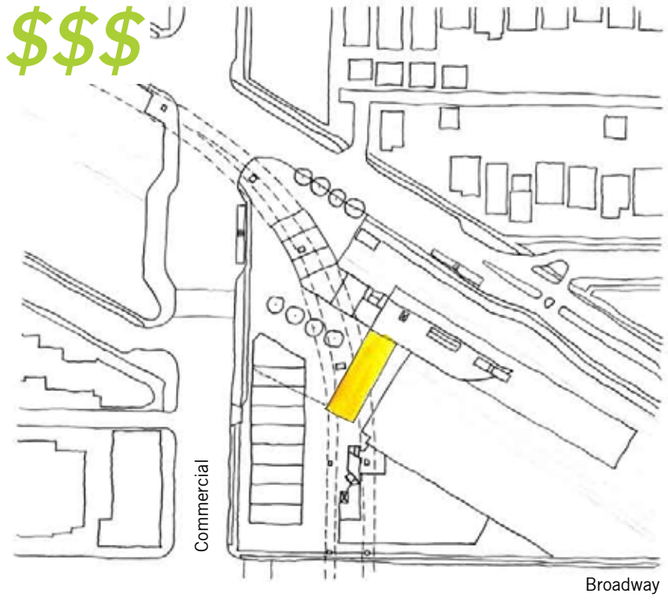


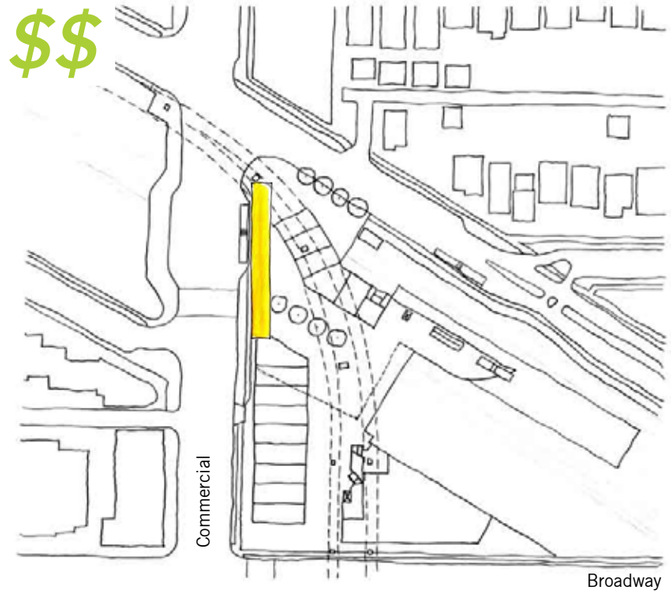
The Commercial Station platform bridge is a choke point for passengers transferring to and from Commercial Station SkyTrain. Temporary partitions have been erected on the bridge to help guide passengers in wayfinding and to separate inbound and outbound flows. As an interim solution to this capacity bottleneck the bridge could be widened.

2.4 Improve Commercial Station Plaza

Commercial Station plaza is occupied by mobile vendors that animate the space but overall the plaza lacks a community feel. There is a significant opportunity for a public art installation to give residents a feeling of ownership over the space. Both the columns of the guideway and canopy lend themselves to being clad in public art or notice boards.

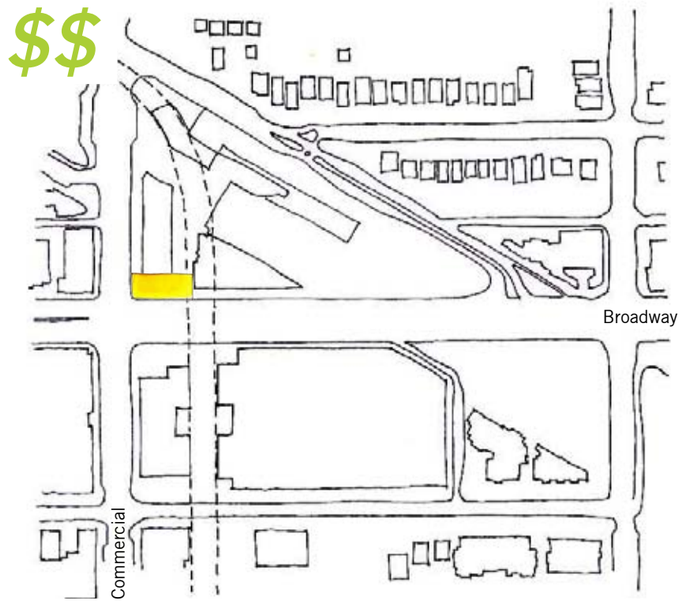
As part of a much larger development scenario, a new plaza would be built over The Cut connecting Commercial Drive to the Commercial Station bridge and Grandview Highway North.

3.1 Weather Protection for B-Line Drop-Off



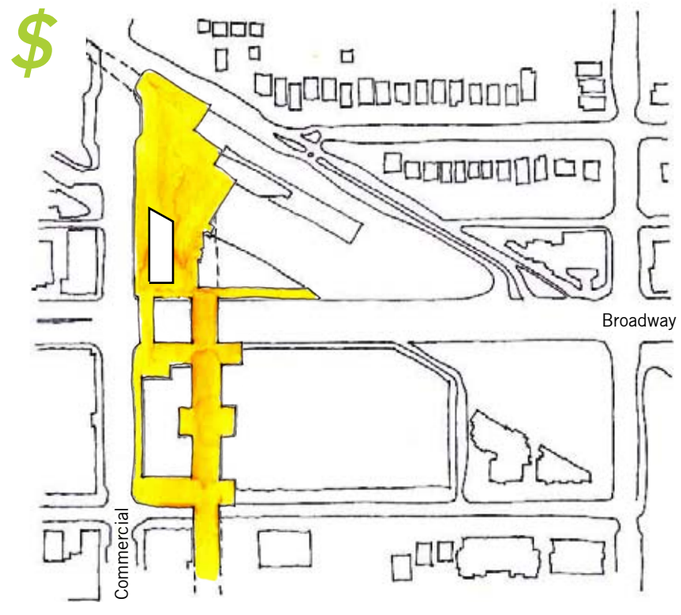
The sidewalk on the east side of Commercial Drive Bridge is the alighting zone for the 99 B-Line and #9 trolley buses arriving from the west. The narrow aspect of this sidewalk combined with the lack of weather protection cause a severe bottleneck during inclement weather as alighting passengers stop to deploy their umbrellas as they step onto the sidewalk. Significant efficiencies in moving passenger flows could be achieved, along with increased passenger comfort, if a canopy were constructed overhead. The canopy would connect to the existing Commercial Station so passengers from the 99 B-Line could walk from bus to station without getting wet.

3.2 Improve B-Line Pick-Up Plaza



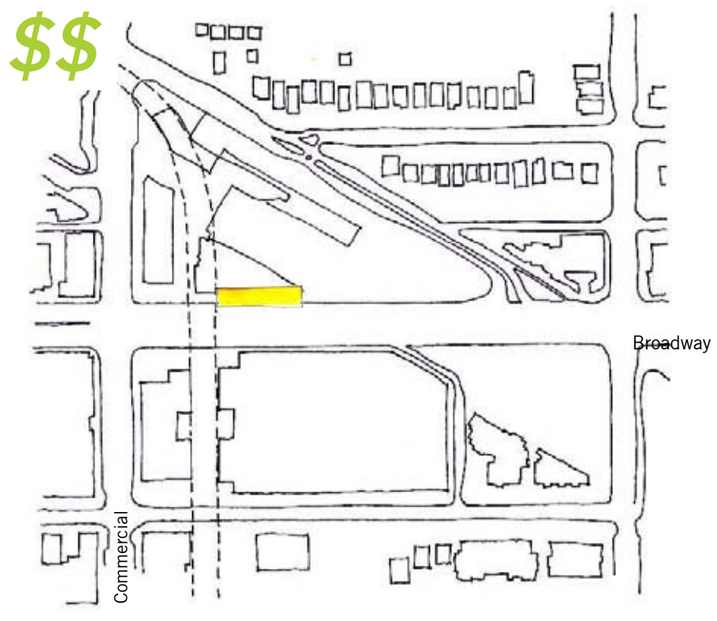
The plaza at the northeast corner of Broadway and Commercial Drive has high pedestrian volumes as it is the queuing area for those passengers boarding the westbound 99 B-Line. Smooth navigation of the plaza is congested by bus shelters and advertising that act as obstacles to transit flows. It is proposed that passenger queuing be embraced as the primary function of the plaza; to that end.

3.3 Consistent Design Treatment



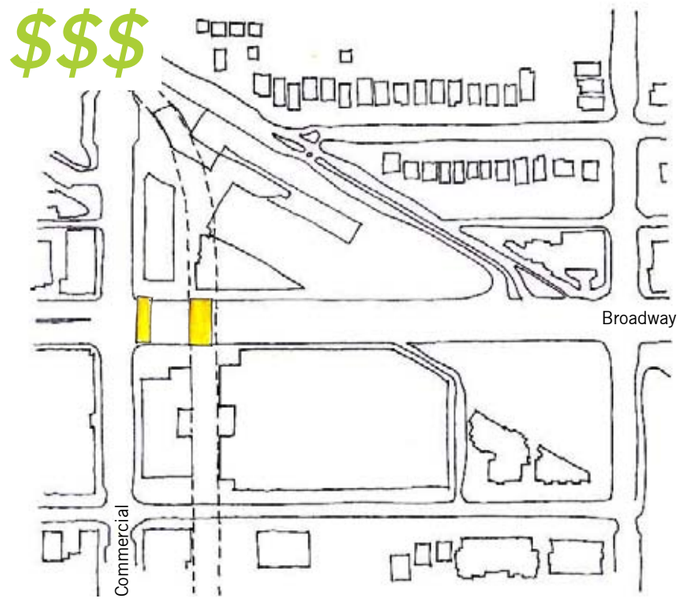
An often-mentioned design intention during the stakeholder consultation process was to bring a consistent design language to the Commercial and Broadway stations so that they work together to create a sense of a place with a coherent and integrated transit village function. Since many of the elements of the stations are fixed, the opportunities to unify the public realm through paving treatment based on the one already used in Commercial Station and with new features, including gateway and informational signage, are key tools to realize this intention.

4.1 Weather Protection for #9 Pick-Up



The sidewalk on the north side of Broadway in front of Shopper's Drug Mart is the queuing zone for the westbound #9 trolley bus. During peak queuing it is difficult for pedestrians on the sidewalk to navigate the queues and street furniture. The bus shelters provide a physical and visual barrier to successful pedestrian movement. It is proposed that the bus shelters be removed and a large canopy be installed that cantilevers out from the face of the adjacent building. This canopy would provide weather protection for queuing and barrier free circulation along the sidewalk.

5.1 Broadway Crosswalk



Large volumes of pedestrians cross Broadway on the east side of Commercial Drive resulting in queuing and congestion at the corners during peak flows. Additional pedestrians cross Broadway mid block at both the Safeway entrance and Broadway Station entrance. Even greater pedestrian crowding and queuing occurs at the 99 B-Line pick-up plaza on the north side. It is proposed that a second crosswalk be introduced, located at least partially beneath the passerelle. This would create a direct link at grade between stations along an established desire line. Further, weather protection could be provided overhead permitting passengers transferring between stations to remain dry.

7.1 Summary of Proposed Improvements

Following public and stakeholder input and further evaluation of the design concepts, a preferred option for both near and medium-long term improvements was developed. The near term improvements focus largely on Broadway Station and its immediate pedestrian and passenger environment. Recommendations for medium-long term improvements consider the entire station catchment, with emphasis on redevelopment adjacent to both Broadway and Commercial Drive Stations.

Both near and medium-long term improvements are described below, relative to the various performance criteria outlined in Section 5.0. Near term improvements are shown in further detail in plan and section studies in sections 7.1-7.9. Medium-long term improvements are discussed in Section 8.

Community Integration

The unification of Broadway and Commercial stations through the introduction of a new crosswalk and paving treatment creates a spine of urban circulation that extends its energy and desire line out to the MOBY community gardens currently under construction below the guideway south of 10th Avenue -- a critical link in encouraging the neighbourhood to take ownership of the pedestrian realm.

Many transit users approach Broadway Station from the south and are currently required to make their way all the way to Broadway, either along Commercial Drive or through the lane, and then backtracking inside the station. The creation of a new Broadway Station entrance directly off 10th Avenue is a significant step in addressing the pedestrian flow patterns for transit user in the community. The proposed entrance provides a direct route into the station which will improve the efficiency of the transit users' experience.

Over the medium-long term, the proposed north plaza provides a connection to the Central Valley Greenway by building out to the plaza to the corner of Grandview HIghway North and Commercial Drive. This connection will permit users of the greenway to more easily and directly transfer to transit. The introduction of bike racks throughout the plaza and Broadway lane, in addition to the bike storage facility within the station, will make commuting by bicycle much more convenient.

Safety & Security

Specific interventions that address the issues of safety are security as follows:

1. Pedestrianize the lane: extending the urban design/paving pattern from the north side of Broadway throughout the lane and station creates a unified urban pedestrian environment. The addition of a public washroom, wayfinding elements, bike racks, public art, and a dumpster enclosure to the lane provide much needed amenity and serve to animate the space. Currently the lane acts as a short-cut to the single north side entrance. The incorporation of the lane into the redesign of the station is essential for providing pedestrian access to the station, while also emphasizing the importance of the lane as a public 'front door' to the station.

2. Replace metal screen facade: greater station/lane transparency is increased dramatically by replacing the existing metal facade at street and platform level on the west side of the station with a fully glazed curtain wall system. Wayfinding will be improved as in many cases passengers will be able to visually locate their destination instead of relying solely on signage elements for orientation. The increased transparency of the station skin will increase natural light within the station, while increasing overall visibility and physical comfort.

3. New retail space: within Broadway Station the addition of new amenities, a Community Safety Office, an operator manned bike storage facility and a large retail space at Broadway, will increase passenger comfort as passengers will see and be seen by the staff at these facilities.

4. South entry: a new entry at the south end of the station will animate 10th Avenue and give passengers arriving at the station from the south the ability to enter the station more directly. The number of blind corners, dead-ends, and recesses are reduced by converting the currently fenced area at the south end of the station to public concourse.

Transit Capacity

The Plan proposes the following:

1. Relocate elevator: Combined with the new 10th Avenue entry, the Plan recommends that the elevator be relocated from the north to the south end of the station, which will allow smoother ingress and egress to the station and reduce the current capacity constraints at the paserrelle.

2. Improved Station entries. A new south entrance and stair, combined with an increase in the size of the north entrance due to the relocation of the existing elevator, will allow smoother ingress and egress to Broadway Station. These interventions will reduce the demands placed on the north entrance and single escalator ultimately allowing passengers to get platform level more quickly. The relocation of the elevator will also reduce the bottleneck at the platform level as passengers enter and exit the passerelle.

3. Widen paserrelle: As an interim solution to point #3, consider widening the passerelle to eke out more capacity from the existing configuration.

4. Alternative layover space for the #9: The layover space on Grandview Highway will be insufficient for at least the next 15 years, until the Millennium Line is extended to UBC. An interim measure is to accommodate an alternate turnaround and layover space for the #9 bus in another area. Either in the near or medium term, a solution exists in the form of incorporating the eastern most portion of the Safeway redevelopment site to accommodate #9 layover needs.

5. Address platform crowding: As part of the long term development concept for the Safeway and CIBC parcels, include side platforms and begin planning for how the vertical circulation would be handled on the Commercial Station side.

Station and Urban Design

Specific interventions that address the issues of station and urban design are as follows:

1. Address passenger crowding: Passengers currently wanting to cross Broadway are forced to use either the overhead passerelle or the narrow sidewalk at Commercial. With the addi-

tion of a second much wider crosswalk directly below the guideway pressure is taken off both existing crossings. The new crossing follows the desire line of passengers making intermodal transfers and is thereby also increasing the efficiency of the system. A canopy would be introduced to the underside of the passerelle providing weather protection for passengers utilizing the new crosswalk. The new canopy would also mark the entrance to the neighbourhood as a gateway element. It is also proposed that the passerelle be widened to increase transfer capacity at the platform level.

The addition of the north plaza at Commercial Station will release the passenger transfer bottleneck between those passengers exiting the 99 B-Line and transferring to either the Expo or Millennium Line. The existing sidewalk on the bridgedeck and the passageway connecting Commercial Drive with the concourse are too narrow to accommodate the expected future capacity increases of the system.

3. Improved Wayfinding: The unification of the urban environment with the introduction of a consistent paving treatment to the Broadway lane combined with wayfinding pylons and a crosswalk below the passerelle will clarify the boundaries of the immediate station environment. Transparent glazing on Broadway Station and a new south entrance will allow passengers to enter Broadway Station at multiple points that are more in line with their desired routes.

The addition of the north plaza will create a new urban realm to which passengers disembarking form the 99 B-Line can immediately enter without circumnavigating the cut by use of the narrow Commercial sidewalk and connecting passageway. Further, Translink is currently in the process of introducing a new signage package that will simplify wayfinding.

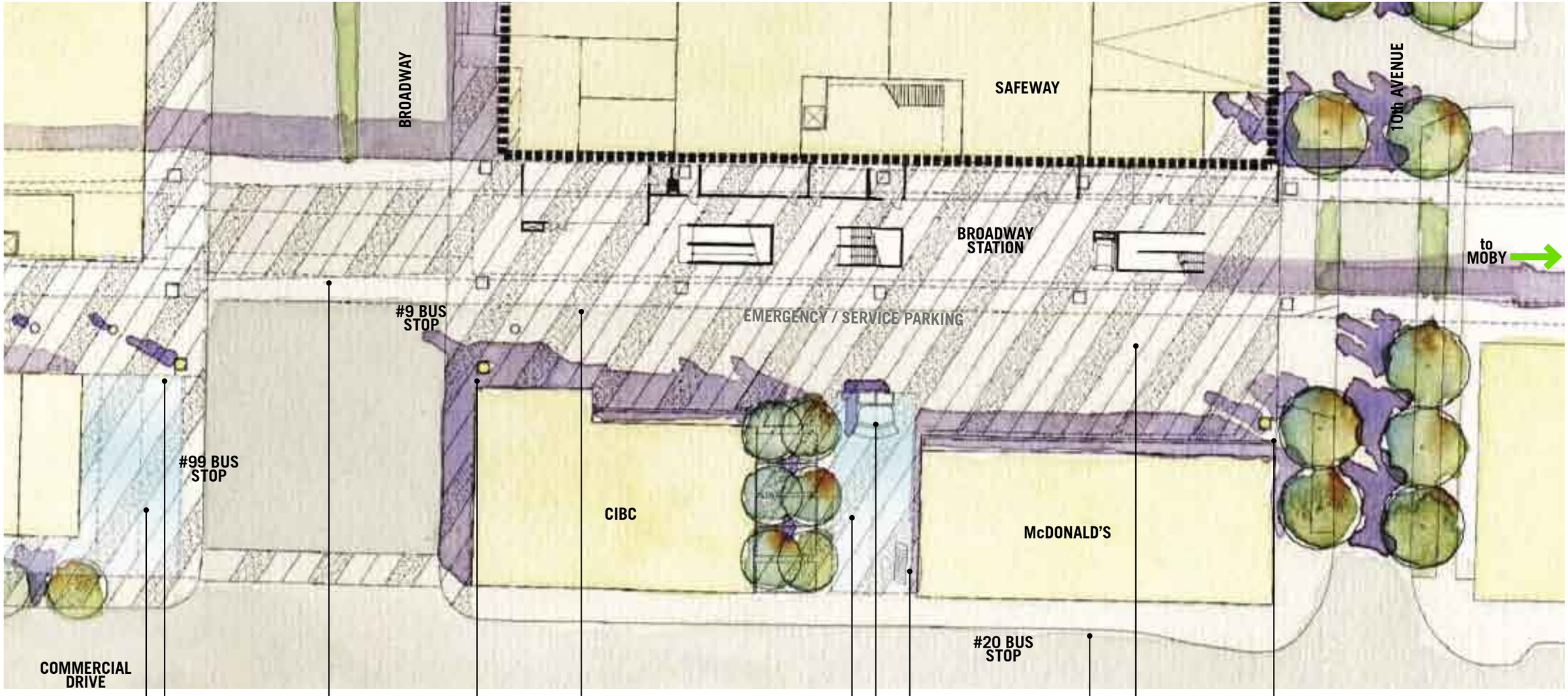
4. Enhanced Urban Environment: The quality of the urban environment will be improved through the introduction of a consistent paving treatment throughout the stations and adjacent plazas/lanes. The two stations will be linked with improved crosswalks that will enable smoother at-grade crossings, and thereby potentially reduce volumes on the passerelle.

The creation of a new north plaza will be a vibrant public realm with shops and services fronting onto it. To Broadway Station, the lane and the north plaza, overhead canopies, street trees, public art, public washrooms and bike racks will create an urban environment rich with a diversity of amenities that service passengers and members of the community alike. The energy created along the north plaza, crosswalk, Broadway lane urban spine will connect into the neighbourhood to the MOBY development to the south of 10th Avenue.

5. Pedestrian and Cycling Links: South of Broadway and west of Commercial Drive, the 10th Avenue Bikeway with its canopy of mature trees and traffic calming is an attractive route to the stations for pedestrians and cyclists alike. The proposed south entrance to Broadway Station would permit access to the station from the corner of 10th Avenue and Commercial Drive which will significantly increase the pedestrian access along 10th Avenue for the Cedar Cottage Neighbourhood. The bike route along Woodlands intersects at 10th Avenue, providing a high amenity cycling route fro the south. With the addition of a manned bike storage facility within Broadway Station the bikeway becomes even more attractive for passengers wishing to cycle to their transit connection.

The catchment are to the southeast of the stations currently has the lowest level of public realm amenity. Long-term redevelopment of the Safeway site offers the opportunity to improve the 10th Avenue frontage leading to the Broadway Station entrance with both streetscape amenity and a more vibrant and interesting built edge.
The area under the Expo SkyTrain guideway between 10th and 12th Avenue has significant potential for improved pedestrian and community amenities and is currently being designed through a collaboration between a community group, MOBY, and the City of Vancouver. By providing a consistent paving treatment to the urban realm in Broadway lane a strong link is created with the MOBY initiative.

Passengers wishing to cross Broadway at Commercial Drive are currently forced to use 3 methods; cross overhead through the passerelle, cross at the designated crosswalk at Commercial Drive, and “j-walk” mid-block between Safeway and Shopper’s Drug Mart. Each method has its inherent disadvantages. The proposed crosswalk with overhead canopy running beneath the guideway will reduce the use of alternative crossings. The crosswalk will have its own signal and passengers will be under weather protection while crossing Broadway.


BROADWAY
SAFEWAY
10th AVENUE
BROADWAY STATION
to MOBY
#9 BUS STOP
EMERGENCY / SERVICE PARKING
#99 BUS STOP
CIBC
McDONALD'S
#20 BUS STOP
COMMERCIAL DRIVE
Canopy & pedestrian lighting
Landmark Pylon
Potential New Crosswalk
Landmark Pylon
BROADWAY STATION
Existing adjacent paving treatment extended across Broadway and under Broadway Station and throughout alleyway.
Canopy & pedestrian lighting
Public toilet and garbage bin enclosure
Future bike rack
SIDEWALKS
Existing sidewalk treatment to be maintained
PAVING
Alternating paving bands: CIP concrete with broom finish and exposed aggregate
Landmark Pylon
0
2.5
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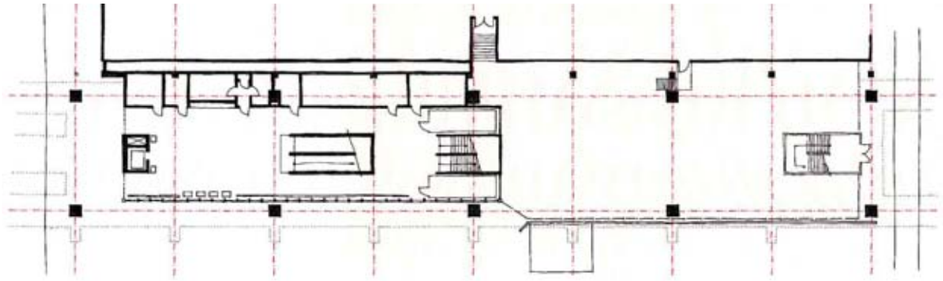
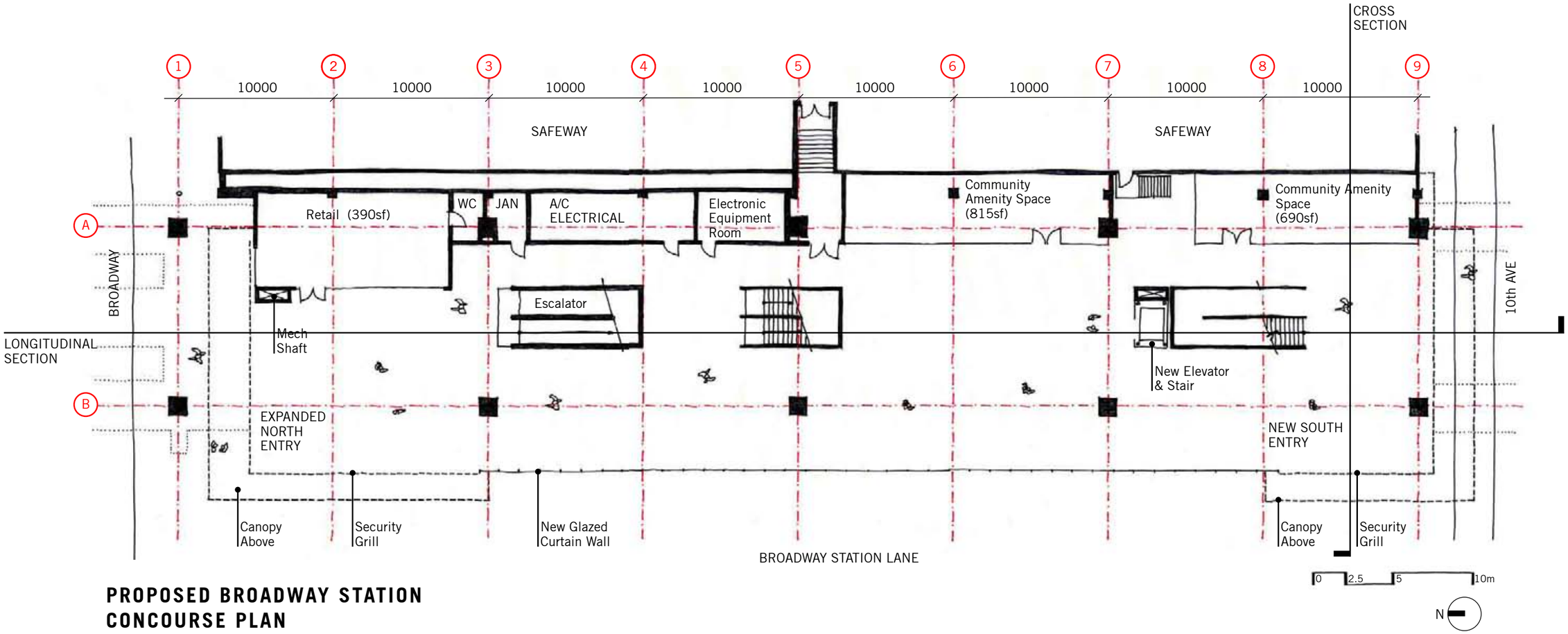
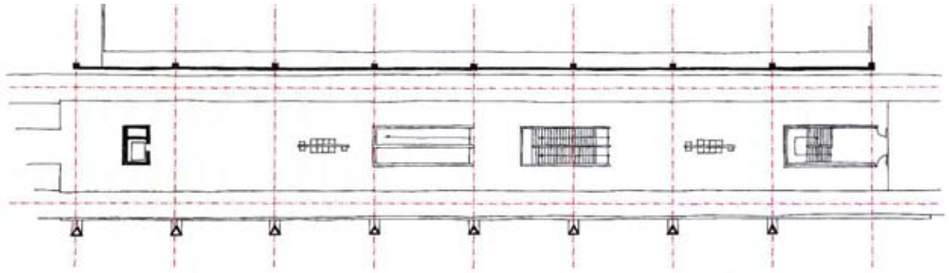


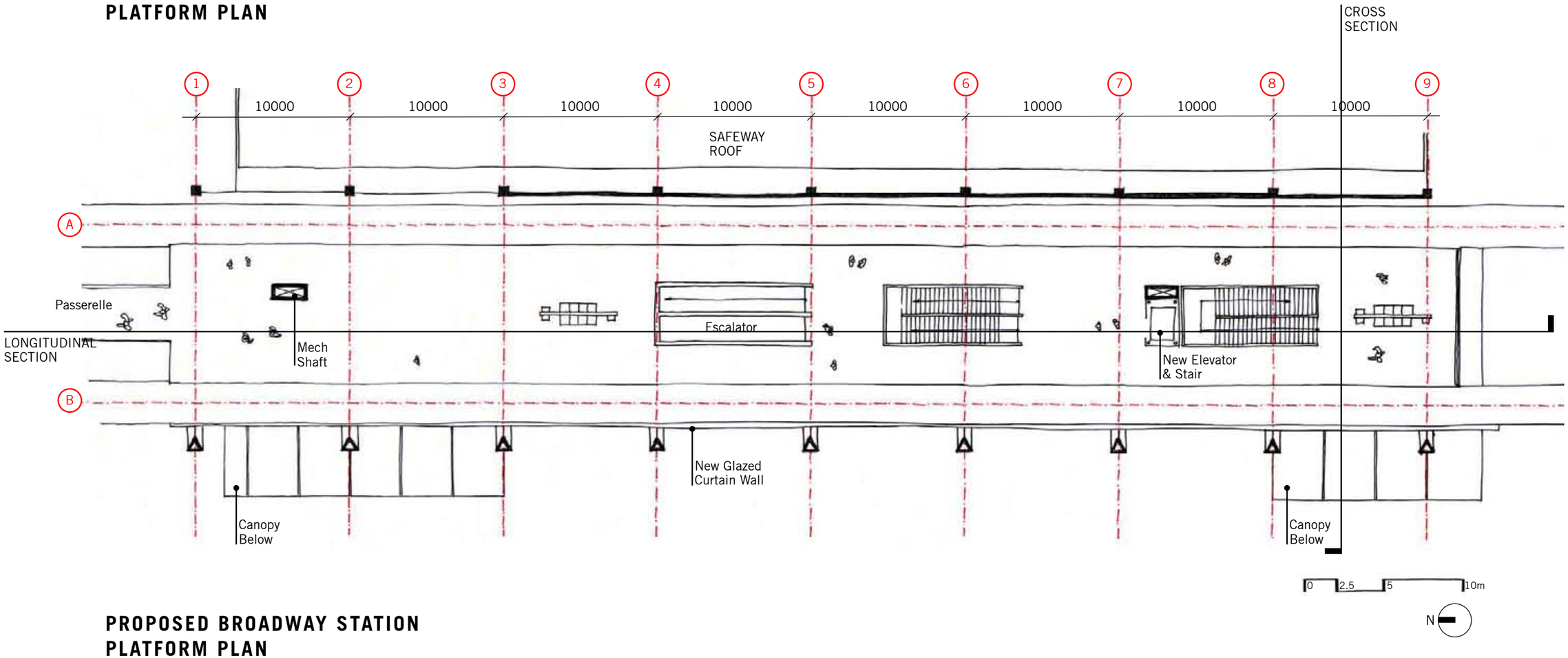
EXISTING BROADWAY STATION CONCOURSE PLAN



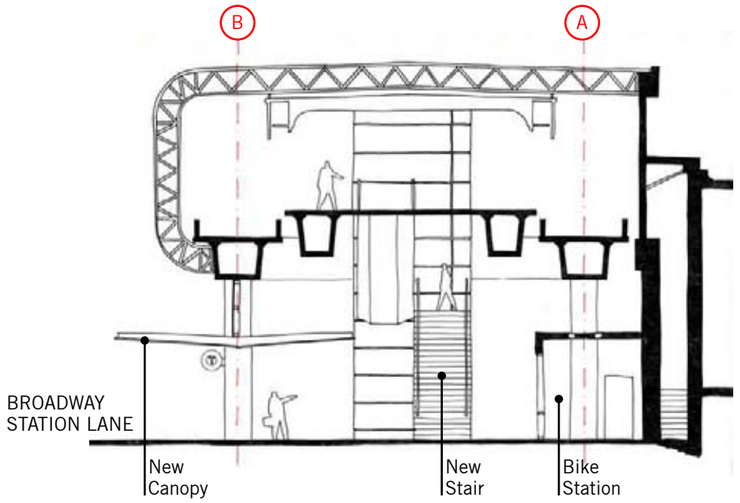
PROPOSED BROADWAY STATION CONCOURSE PLAN



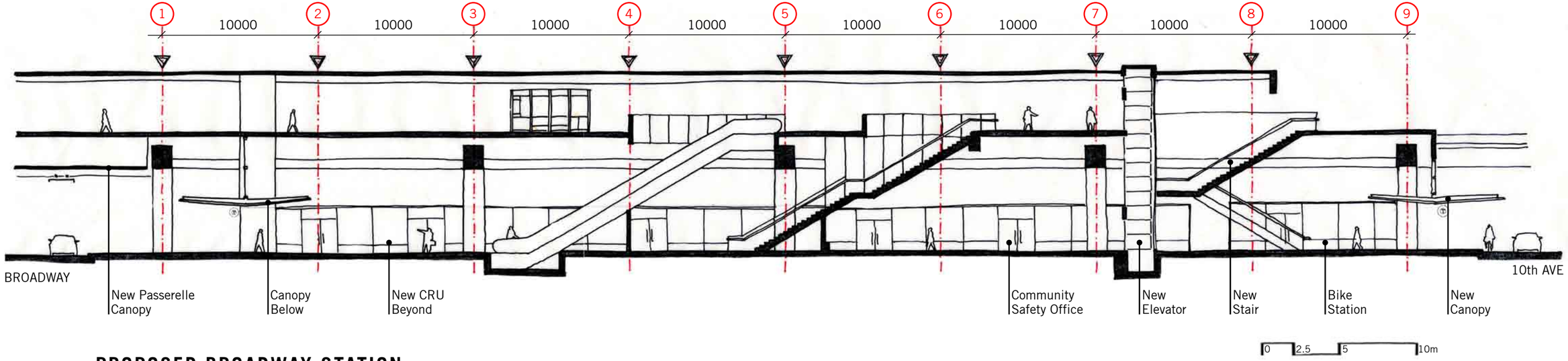
EXISTING BROADWAY STATION PLATFORM PLAN



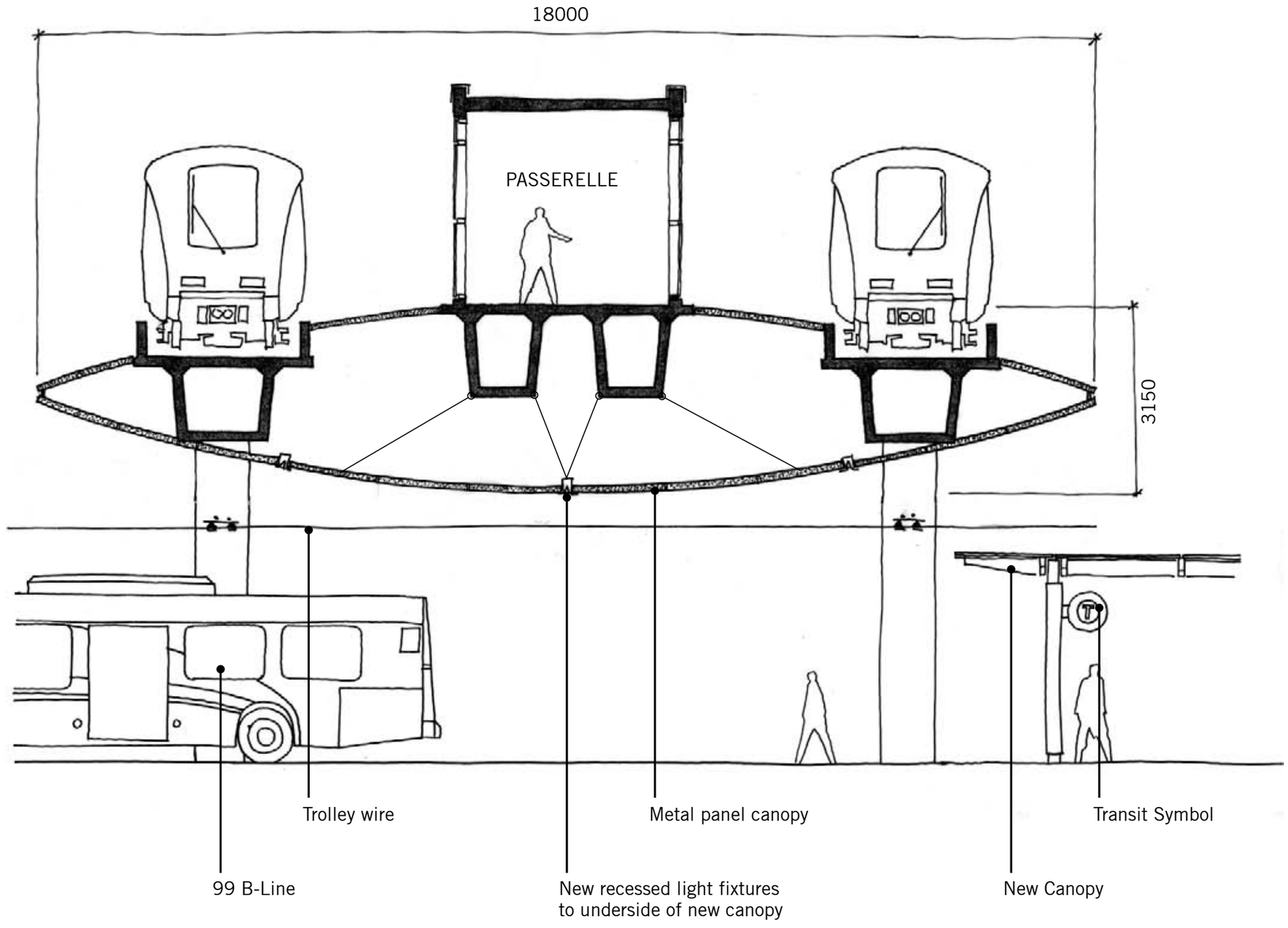
PROPOSED BROADWAY STATION PLATFORM PLAN



PROPOSED BROADWAY STATION
CROSS SECTION

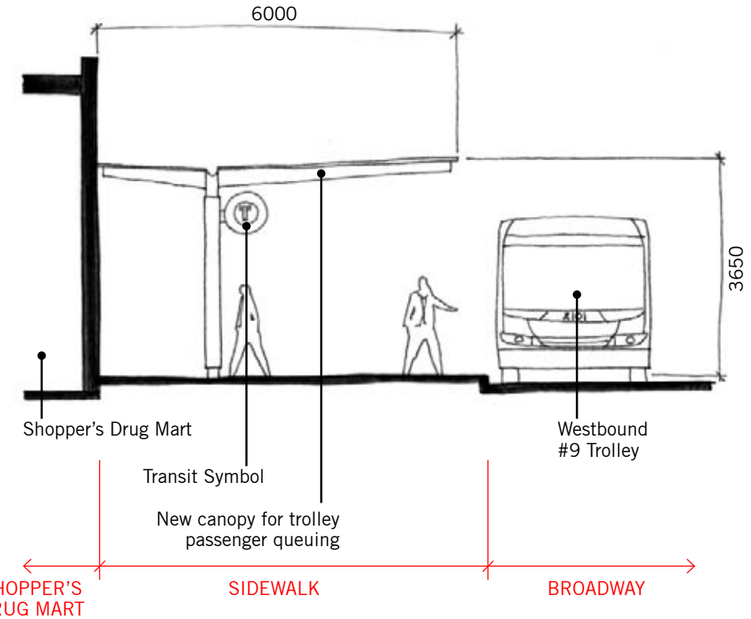


PROPOSED BROADWAY STATION
LONGITUDINAL SECTION

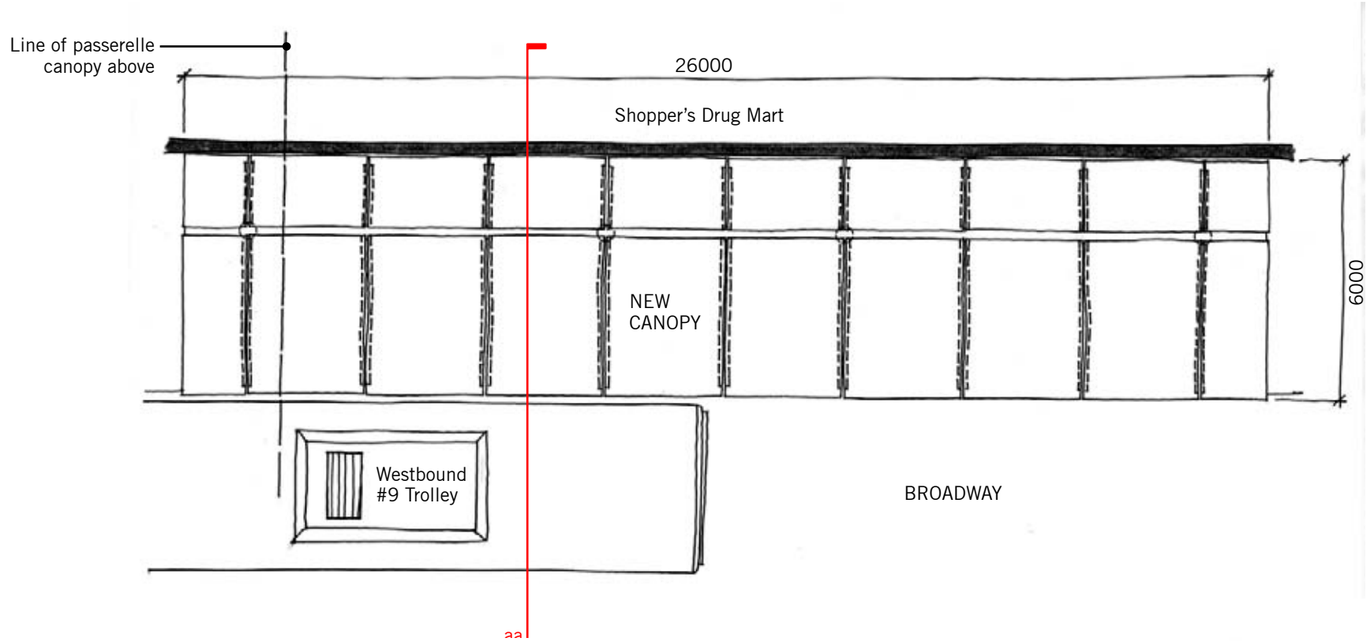


0 1 2.5 5m

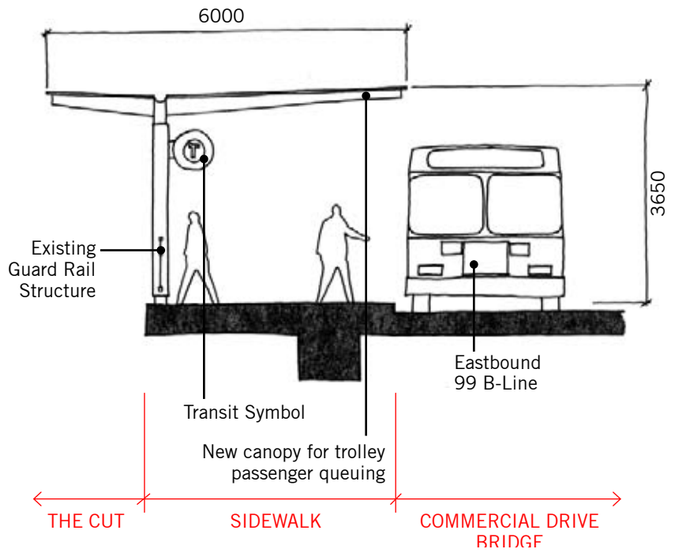
SECTION THROUGH NEW PASSERELLE CANOPY



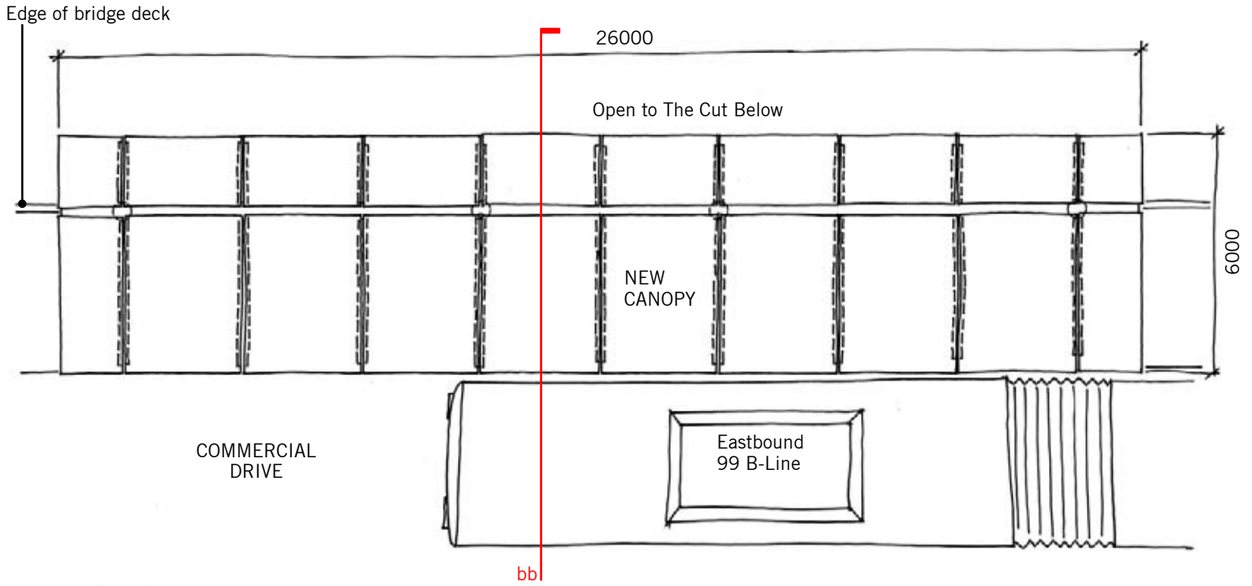
SECTION AA: NEW BROADWAY CANOPY



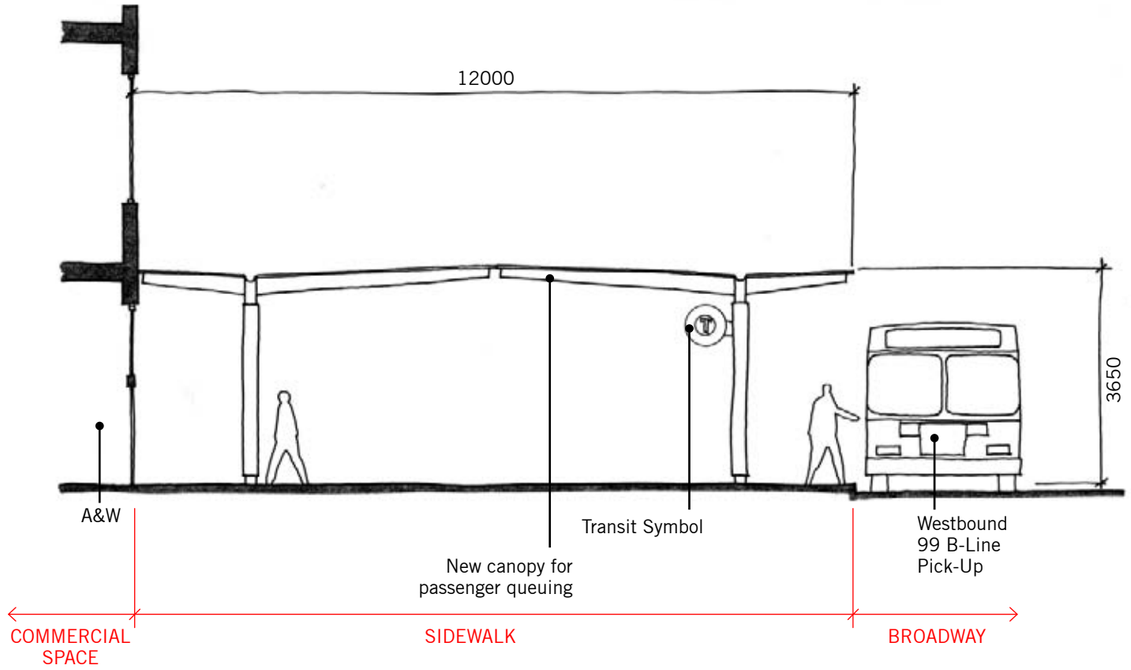
ROOF PLAN: NEW BROADWAY CANOPY



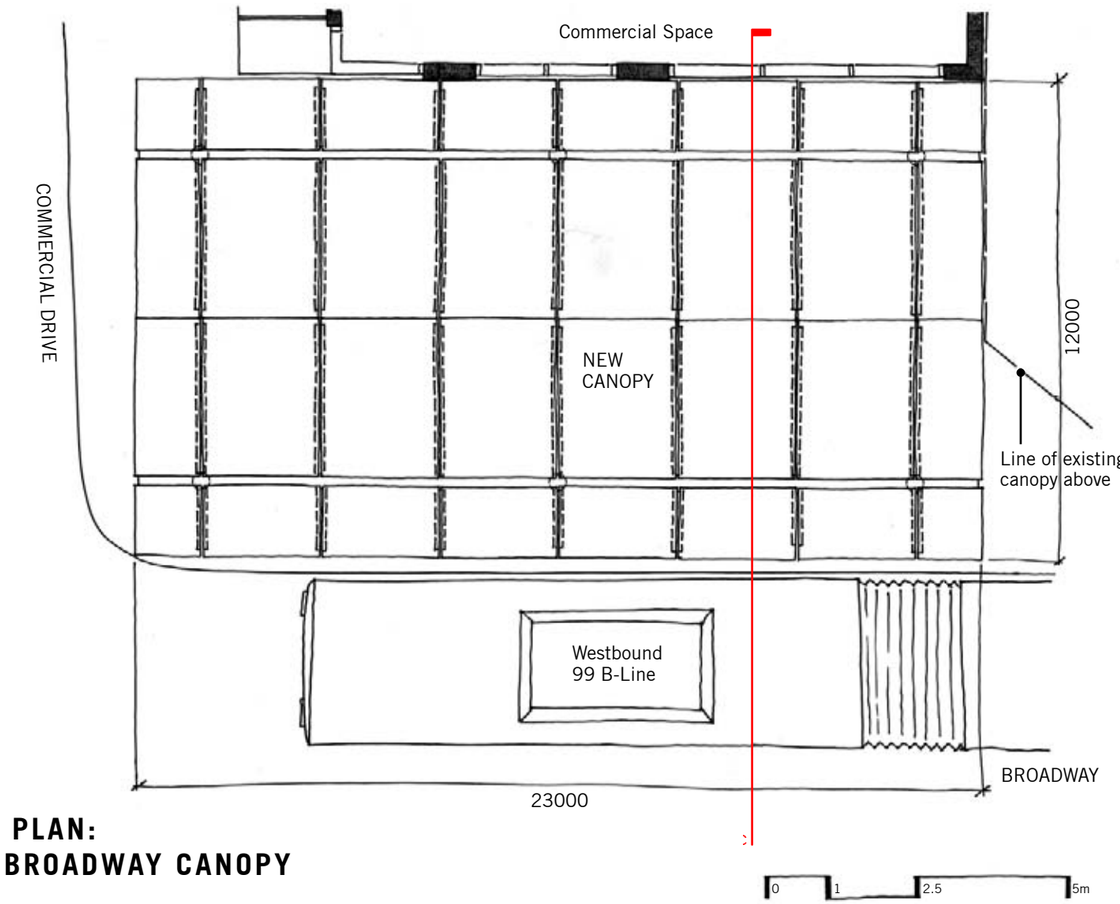
SECTION BB: NEW COMMERCIAL BRIDGE CANOPY



ROOF PLAN: NEW COMMERCIAL BRIDGE CANOPY



SECTION CC:
NEW BROADWAY CANOPY

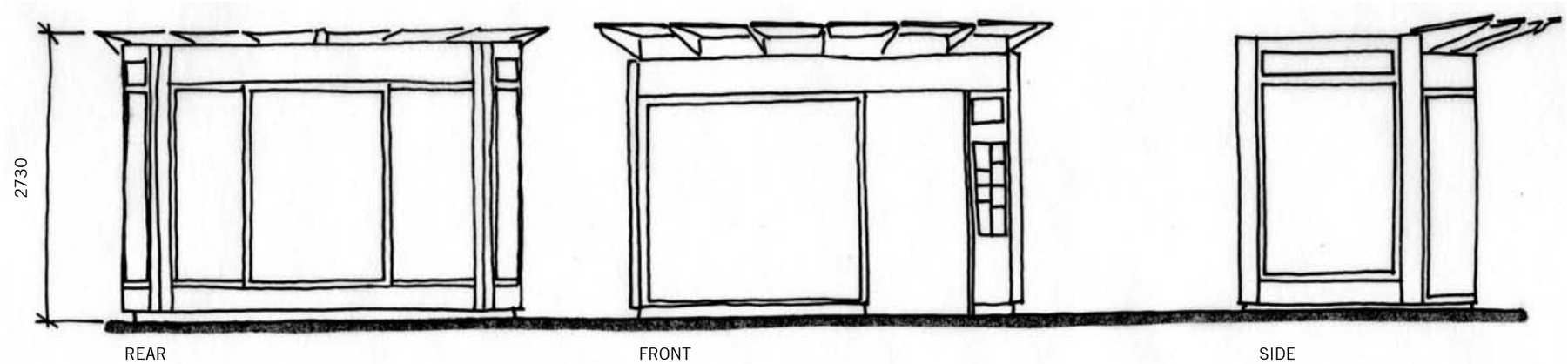


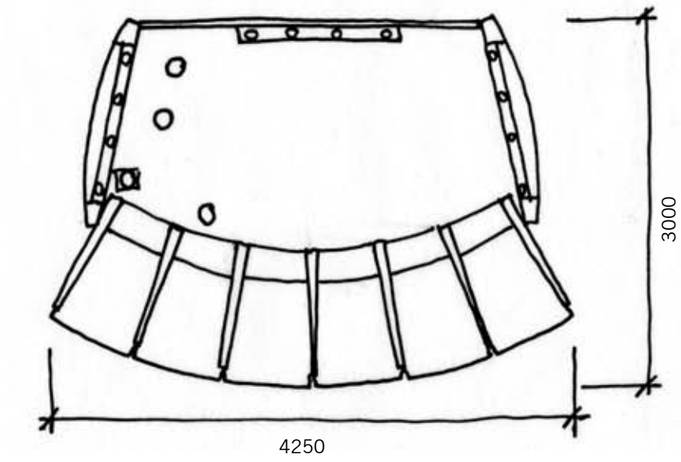
ROOF PLAN:
NEW BROADWAY CANOPY

7.5 Lane Improvements: Public Toilets

The lack of public toilet facilities emerged as a major concern amongst stakeholders at the public open house. Attendees identified that only private facilities provided by merchants are currently available to transit riders and this level of service is unacceptable.

As a direct result of this feedback, it is proposed that the City of Vancouver and TransLink use Broadway Station as a test facility for the Duceaux public toilet. Essentially, the module is a self-contained and self-cleaning coin operated toilet facility. The unit will be placed in the lane between the Broadway Station lane and Commercial Drive. It's location is indicated on the site plan on page 53.





DUCEAUX PUBLIC TOILETS

7.6 Wayfinding

Information pylons are proposed at four key locations around the Broadway and Commercial Stations: north of the entry to the Commercial Station from Commercial Drive, flanking Broadway east of Commercial Drive near the main entries to both stations, and south of the Broadway Station on 10 th Avenue at the proposed new south station entry (refer to plan on page 53 for specific locations). These pylons are envisioned as vertical markers with roles in wayfinding, creation of a gateway along Broadway, and provision of information.

The conceptual design sketch illustrates a pylon that incorporates elements from the wayfinding signage recently proposed by TransLink. It has an elliptical section on a cylindrical base and incorporates the system-wide icons for bus and SkyTrain stops, transit maps and schedules, an information board for community notices, and a digital signboard suited to displaying real time information on time, date, weather, and transit arrivals / departures. The uppermost element is a light beacon that would maintain wayfinding and gateway functions at night.

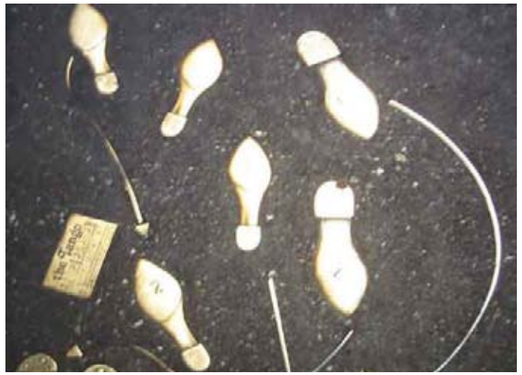
INFORMATION
WAYFINDING PYLON

7.6 Public Art

There are numerous opportunities for public art in the station and surrounding areas, and along the routes that access transit from surrounding neighbourhoods. Places suited to free standing art pieces should be carefully selected to ensure that pedestrian movement and queuing areas for buses are not compromised. Public art can be used to embellish and add interest to many elements that are required for functional purposes including: paved surfaces, glazing, stair risers or treads, walls, fences and other barriers, benches, the tops of signage poles and support columns. Themes to inspire public art are likewise numerous and could encompass local history, transportation and movement, and natural history related to the Grandview Cut and Central Valley Greenway. Art can bring a moment of engagement among strangers waiting for a bus through reference to shared experiences or with humour and whimsy.

FLUID MOTION, ALAN STOREY
SAPPERTON SKYTRAIN STATION, NEW WESTMINSTER

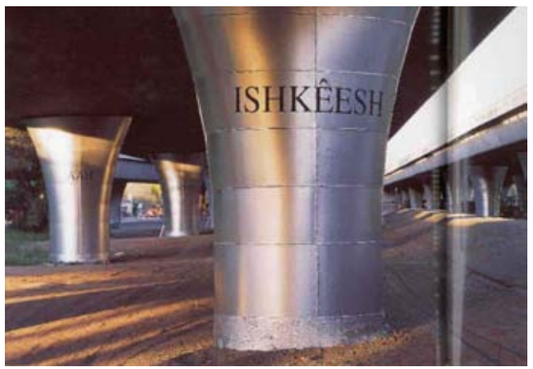
MAKE WEST, BILL PECHET
COAL HARBOUR, VANCOUVER



THE MAMBO, JACK MACKIE
SEATTLE

PIXILATED RING BENCH, SALLY MICHENER
CENTRAL VALLEY GREENWAY, VANCOUVER

WALKING THE SKY, JONATHAN BOROFSKY
ROCKEFELLER CENTER



MARKINGS, HARGREAVES ASSOCIATES WITH JULIAN LANG,
SAN JOSE

LOCALMOTION, JILL ANHOLT
BRENTWOOD SKYTRAIN STATION, VANCOUVER

7.7 Crosswalk Improvements

The need to improve the crossing at Broadway responds to several key issues at the street level as well as within Broadway Station.

Crowding at Crosswalk

Broadway is currently a significant pedestrian barrier and boundary between the stations and local neighbourhoods. Passengers accessing the station from the north either travel through Commercial Drive Station and cross the paserrelle, or cross at the Broadway / Commercial Drive intersection. The most recent pedestrian counts show high pedestrian volumes crossing Broadway intersection, eastside particularly at PM peak (1606/hour). The existing crosswalk width of 4m needs widening in order to accommodate these volumes. Further constraining the crosswalk are utility poles, the 99 B-line shelter on the north side of Broadway, and narrow sidewalks on the south side of the Broadway.

Jaywalking

Improvements to this intersection are also required to address the strong desire lines of passengers directly between stations and consistent jaywalking. crossings in the long block between Commercial and Victoria by passengers of Expo line trains rushing to catch either #99 B-Line or #9 buses or by passengers and pedestrians at Commercial Dr. station crossing to the Broadway Station entrance, or diagonally to Safeway. Safety concerns about any proposed change must be weighed against the obvious safety problems of the existing condition.

Congestion on the Paserrelle

The paserrelle has a limited width to accommodate current peak volumes of transferring passengers. With current peak volumes at roughly 7000 people per hour and an effective width of 3.15m (actual width of 4.0m), the paserrelle is operating below the recommended level of service, particularly given relatively frequency of train arrivals. These capacity issues will worsen as ridership and transfer volumes continue to increase at the station.

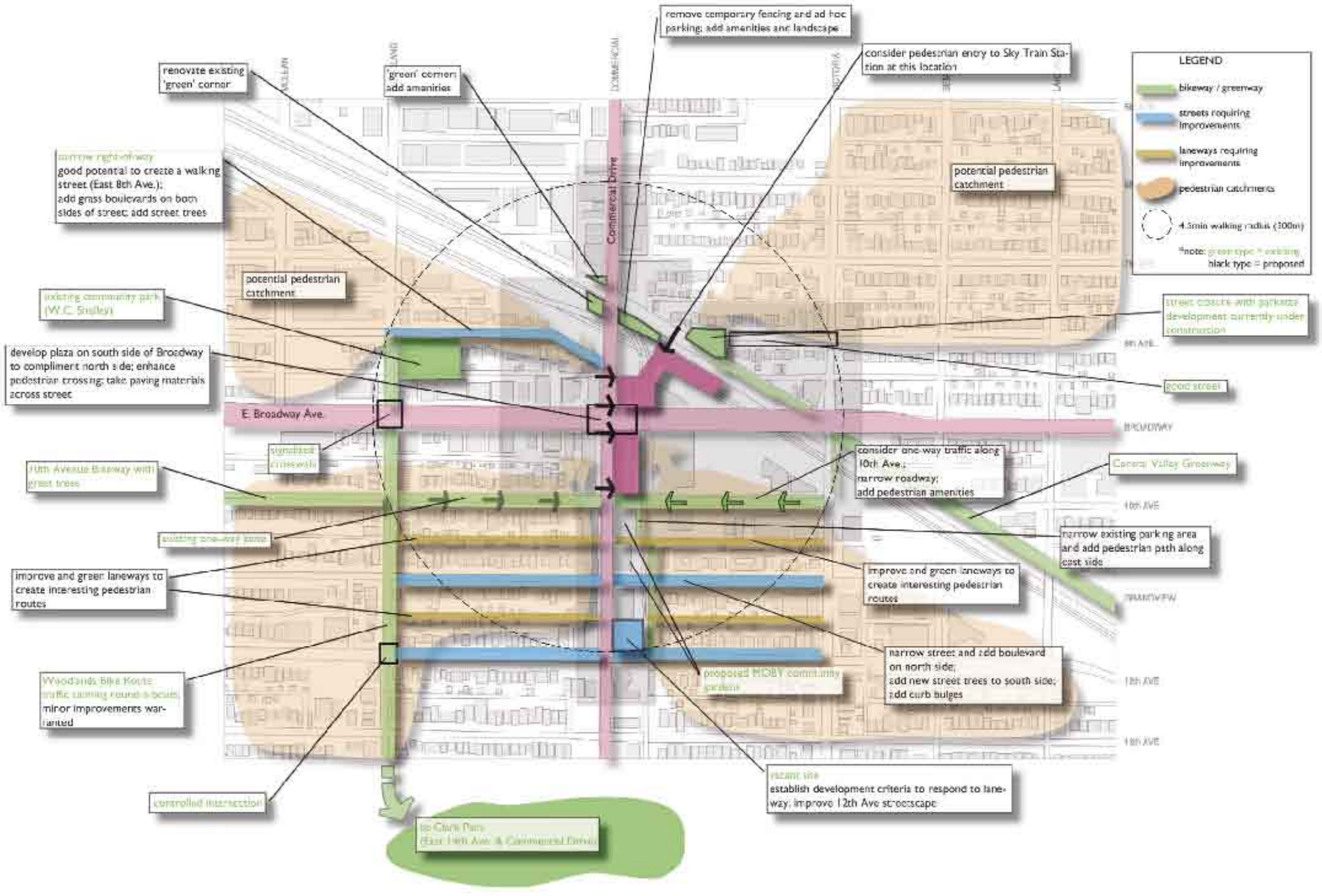
Several options are under consideration, including: widening the existing crosswalk and providing an additional crossing further east of the Broadway/Commercial intersection.

Each option assume that crosswalks would feature a distinct design treatment (paving consistent with pattern on north side), and all but one assumes double signals (the existing Commercial Drive signal and a new one at the new crosswalk) that would be synchronized with each other. Further, in all options a median barrier, in the form of a low fence, may be advisable to reinforce the desired movement patterns at new crosswalks and eliminate opportunities for jaywalking.

Other related options include widening the paserrelle, and changing bus operations to better distribute transferring passengers within the station hub.

A variety of factors need consideration in evaluating the feasibility of options including pedestrian safety and comfort; passenger transfer experience; wayfinding and legibility; transit operations; GP traffic travel time; and cost.


T

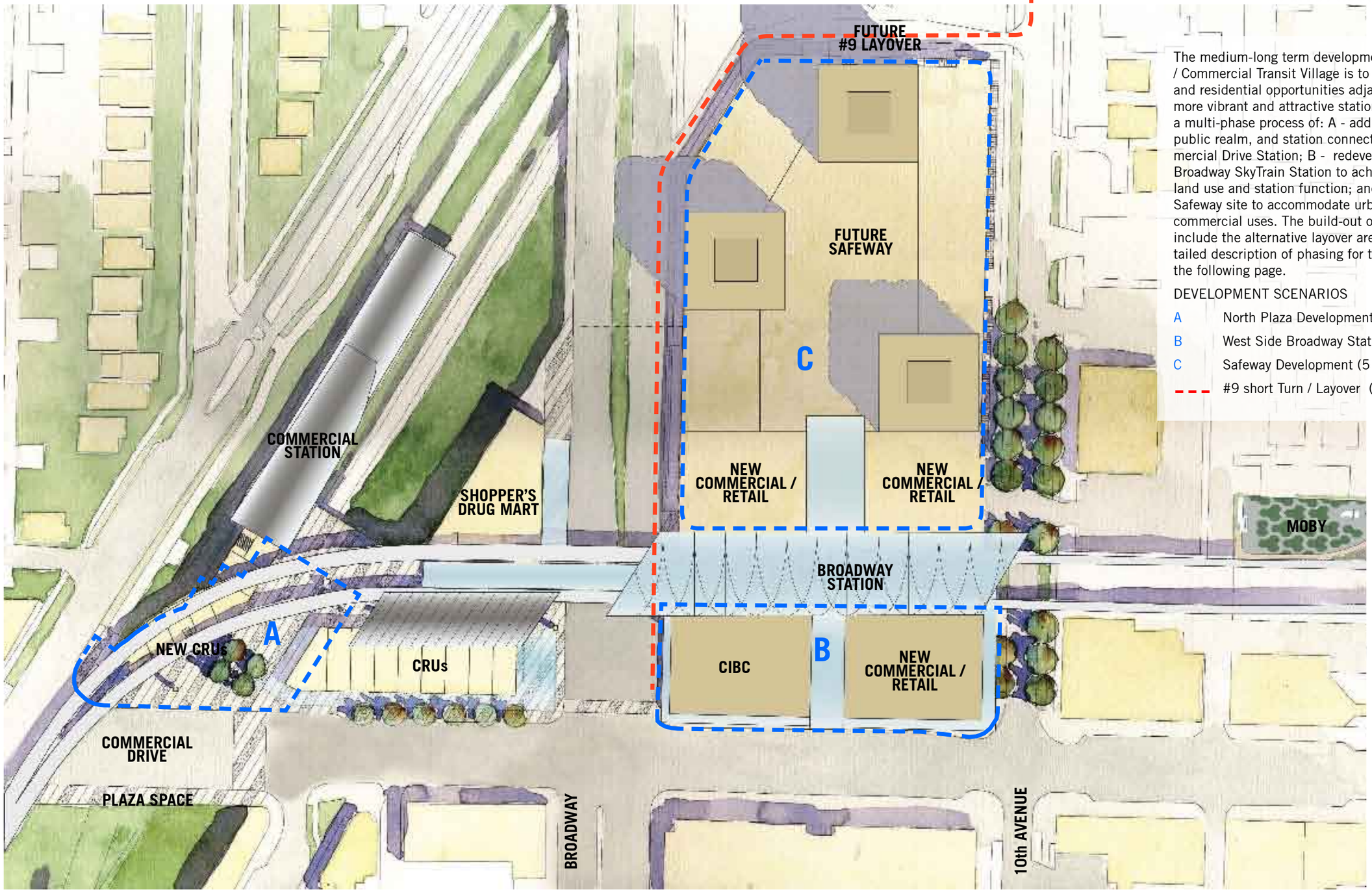


In the course of the project, a number of strategies were identified for improving pedestrian connections and amenities in the blocks surrounding the Broadway and Commercial Stations. Although these potential improvements were not selected through the process for implementation with the Showcase funds, there is substantial scope for upgrading streetscapes and lanes and creating pedestrian links that will encourage increased use of transit and cycling. These improvements may be obtained through redevelopment in some cases.

The historic streetscape fabric is in place on some of the streets in the neighbourhood and is typified by mature street trees in grass boulevards. The 10th Avenue Bikeway west of Commercial Drive is an example and is much appreciated by the community. Other blockfaces, especially where commercial or multiple family development has occurred, have lost their continuous street trees and seen the boulevards paved. Potential improvements include a reinstatement of trees and boulevards and implementation of pedestrian bulges at corners, where possible, to add green landscape and reduce crossing distances for pedestrians. Greening of laneways to invite use by pedestrians and cyclists should also be encouraged with redevelopment.

The areas between the elevated SkyTrain alignment and Commercial Drive that are being planned by MOBY with community gardens as the first phase will provide amenities for the neighbourhood and improve the experience of walking between 12th Avenue and the new 10th Avenue entrance to the Broadway Station. A safe shortcut through the half-block south of 10th Avenue to connect to the MOBY site is key to permitting pedestrians to take this route and should be facilitated by negotiating a publicly accessible route across one or both of the two parking lots in this area.

Development of the Safeway property is a significant opportunity to upgrade the streetscapes on Broadway, 10th Avenue, and Victoria Drive for pedestrians and improve sections of the bikeway on 10th Avenue and Victoria.



The medium-long term development concept for the Broadway / Commercial Transit Village is to encourage more commercial and residential opportunities adjacent to the stations, creating a more vibrant and attractive station precinct. This would involve a multi-phase process of: A - adding more retail development, public realm, and station connections at the north end of Commercial Drive Station; B - redevelopment of the west side of Broadway SkyTrain Station to achieve better integration between land use and station function; and C - redevelopment of the Safeway site to accommodate urban densities of residential and commercial uses. The build-out of the Safeway site would also include the alternative layover area for the #9 route. A more detailed description of phasing for the Safeway site is provided on the following page.

DEVELOPMENT SCENARIOS

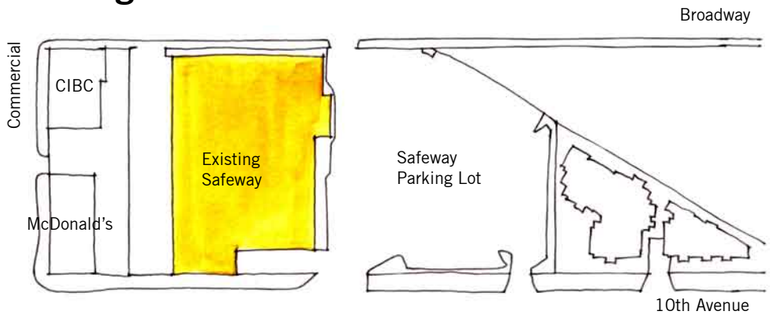
A North Plaza Development (3 - 5 years)

B West Side Broadway Station Development (3 - 5 years)

C Safeway Development (5 - 10 years) : See Appendix D

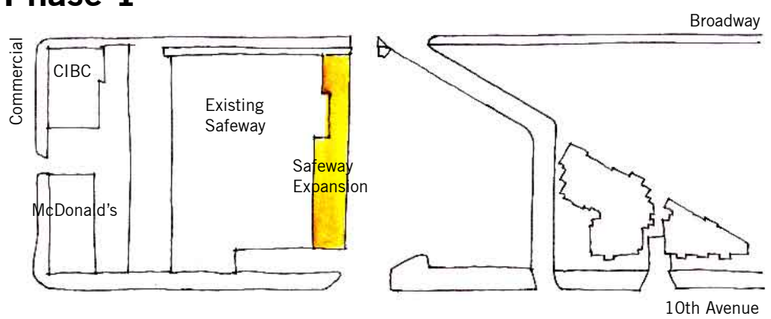
#9 short Turn / Layover (3 - 5 years)

Existing Condition



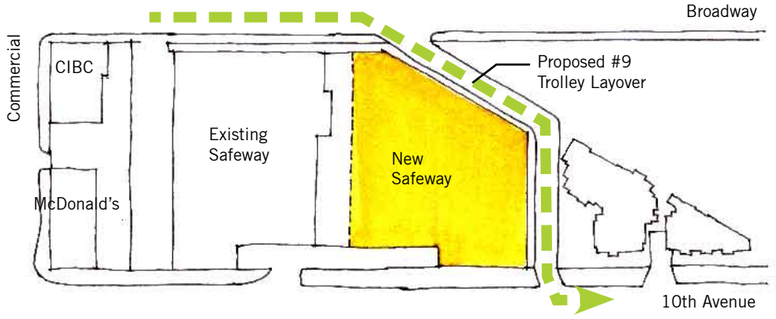
The existing Safeway site is occupied by a 40,000ft^2 store and approximately 72,000ft^2 of parking lot. A 3 phase renovation of the site that would allow Safeway to relocate to the eastern portion of the site with a store area of 60,000ft^2.

Phase 1



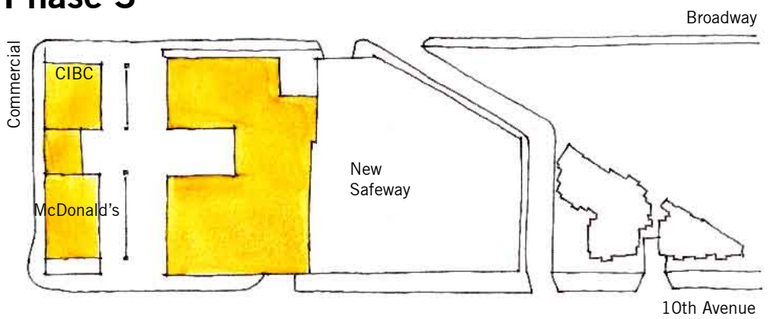
Phase 1 of the development would see Safeway building an additional 20,000ft^2 of store to the east of the existing store to bring the total store area to 60,000ft^2.

Phase 2



Phase 2 of the development would see Safeway construct a new 40,000ft^2 store to the east of their existing facility. The existing store would remain operational until the new store opens so that there is no interruption of customer service. The new store would retain the addition completed in Phase 1 for a total area of 60,000ft^2. At the same time, in conjuction with a consolidation of all the #9 drop-offs to Broadway Station, a new layover space and pedestrian mews could be built to the east of the site.

Phase 3



Phase 3 would see the redevelopment of the existing Safeway store along with redevelopment of the CIBC site, McDonald's site and the lane to the west of Broadway Station. The multi-level redevelopment would create a concourse at grade that encourages movement through the station from Broadway to 10th Avenue and to the south.

Precinct Planning

The planning of the Millennium SkyTrain line triggered a precinct planning process by City of Vancouver Staff working with the Rapid Transit Project Office (RTPO) and TransLink towards transit interface planning, guideway alignment, Greenway and Bikeway planning and design, neighbourhood planning, and refinements of station designs, that have led to the existing transit hub. The process included extensive public consultation by both the City and RTPO, and the participation of a neighbourhood working group composed of residents and business people. Some of the planned enhancements, specifically public realm and station improvements, were not able to be implemented through SkyTrain construction and Municipal Integration Funding, thereby laying in wait for other 'efficiencies and partnerships' to be achieved in the future, such as the Showcase Program.

Key initiatives and developments that have resulted from recent precinct planning and that will require ongoing coordination include:

- Millennium Line Commercial Station / Grandview Highway North Bus Layover, which included a traffic calming plan, elimination of the street as a truck route, shorter pedestrian crossings;
- Public Realm improvements such as lighting, wider sidewalks, street furniture and public art;
- C-3A zoning guidelines, and the completion of the 'Triangle' site rezoning and redevelopment of public plaza and commercial frontages;
- Broadway Station Precinct Parking Requirements, residential and commercial reductions

Community Visions

The 1998 Council approved Community Vision for Kensington / Cedar Cottage provided a number of directions that also received a high level of support, relevant to the Broadway Commercial Shopping Area and Transit Hub. Many of the directions fall into the scope of work being addressed in the current Transit Village Showcase Project, in addition to the previous initiatives noted above.

Community Vision Directions that received a high level of support can be categorized as follows:

Neighbourhood Development

Many points raised in the Vision process have been addressed in specific public realm improvements, such as improvements to the northeast corner of Broadway / Commercial and associated retail development for this site, lighting of the Safeway parking lot, and the completion of Design Guidelines for the C-3A district schedule of the City's Zoning and Development By-Law.

The Showcase program also furthers the Vision directions for area improvements by providing more pedestrian oriented improvements, including additional emphasis on crosswalks, safety (CPTED principles), weather protection, and general cleanliness (garbage and private property cleanup).

The Vision directions also support protecting the amenities of the Grandview Cut, such as views and public access, in addition to supporting a strengthening of neo-traditional forms of commercial developments (no malls or big box retailers) to foster more community-oriented activity.

Transportation

The Vision directions clearly identified a need to include the community in decisions that would see improvements to the station(s), along with comprehensive planning. Public consultation of conceptual design interventions has included the residents of the community as well as local stakeholders and transit uses, thereby providing valuable feedback regarding neighbourhood issues.

Specific Vision directions addressed by the Transit Village Plan include the need for street-level oriented transit stations, better bus shelters, lighting, schedules, maps, and strong links to shopping and bikeways.

MOBY Project

The residential zoned properties under the Expo line guideways have been leased by the City of Vancouver from Translink for a community amenity project spearheaded by "My Own Backyard" (MOBY) Community Group Association.

The purpose of the MOBY project is to offset the impacts of the SkyTrain on the neighbourhood by providing a highly useful and aesthetically pleasing space that will create a sense of ownership for residents. In applying CPTED (Crime Prevention Through Environmental Design) principles through this project, a more inviting public space will be created, connecting local residents with businesses and the transit system.

A key component of this connectivity will include the improvements to the south end (or entrance) to the Broadway Station, by removing physical and visual barriers between the MOBY development and the "Transit Village". A direct connection needs to be established by means of a pedestrian crossing of 10th Avenue, and a well lit path under the guideway across the private properties adjacent to 10th Avenue. Beyond these properties, a more informal network should be developed across the City lanes and 11th Avenue, linking the MOBY project to the neighbourhood.

Central Valley Greenway

Once complete, the Central Valley Greenway will be a 25 KM multi-use pathway connecting key destinations in Vancouver, Burnaby and New Westminster. The Greenway's intersection with Commercial Drive at Grandview Highway North should maximize opportunities for linking pedestrians and cyclists to the stations while also celebrating the unique attributes of the site and community through public art, wayfinding, and amenities such as bike racks, seating, and lighting.

The current phase of the Greenway is being developed in three sections, with construction anticipated to be complete by January 2007.

Further integration of the Greenway into the station precinct will be ongoing as part of the medium - long term development vision for the North Plaza at Commercial Drive Station.

1999 Charrette Objectives and Outcomes

In July 1999, the City of Vancouver's Rapid Transit Office, in collaboration with Rapid Transit Project 2000, sponsored an urban design charrette for the Broadway/Commercial Station Precinct. The main objective was to respond positively to the proposed SkyTrain extension providing ideas for fitting the station and its associated development into the fabric of the community. A Working Group composed of residents, merchants, property owners and community group representatives was struck to provide a discussion forum and also to provide advice to the City and rapid Transit Project 2000 through the charrette process. The objectives of the charrette were as follows:

- To verify or revise the urban design directions for the precinct
- To confirm the realistic development opportunities available in the precinct, and propose appropriate land uses
- To prepare an integrated concept that proposes to make the station precinct and station environment a special place, including notions of built form
- To propose measures to reduce the impacts of traffic in order to improve the pedestrian-friendliness of Commercial Drive
- To propose how a usable, safe and attractive community open space can be implemented in the station environment
- To propose measures to capture the interest of as many of the increased transit users as possible, thus increasing the potential customer base for local businesses
- To propose measures to reduce the "leakage" of retail shopping dollars to other shopping areas by providing attractive local opportunities
- To propose measures to mitigate, through design, the impacts of the new SkyTrain guideway and station, as well as other transit impacts, on existing residential areas

The results of the charrette are summarized as follows;

1. Identity:

- Retain the identity of the Grandview Cut as an important linear landscape feature
- At the new Commercial Station preserve sightlines to Downtown and to historic rail use

2. Character:

- Improve the character of Commercial Drive
- Maximize potential of the CIBC/McDonald's block
- Define the street with appropriate street wall buildings and public realm
- Favour pedestrians and buses over cars and trucks with special crosswalks and bus bulges

3. Gathering Place:

- The preferred location for a community-oriented gathering place was different in each scheme
- Team A chose the 'triangle' site at the northeast corner of Broadway and Commercial
- Team B proposed the area around the intersection of 10th Ave and Commercial
- And Team C suggested widening and greening the Commercial Drive bridge over The Cut

4. Public Realm:

- Substantially improve the public realm to promote pedestrian movement between SkyTrain stations and bus stops
- Incorporate a high quality of design that recognizes the triangle site and intersection as a regional transit hub

5. Community Centre:

- Make 10th Ave and Commercial Drive the centre of the community
- Focus public realm improvements to this intersection to help make it a new heart of the retail district (trees, special paving, crosswalks, lighting, etc.)
- Integrate in the redevelopment of the CIBC/McDonald's site

6. Pedestrian Links:

- Pedestrian links were located in different locations in each concept
- Team A introduced a new 'community shortcut' across The Cut and through the Safeway site
- Team B directed pedestrians onto Commercial to support its' revitalization as a high amenity retail street
- And Team C defined a network of greenways

7. Redevelopment:

- Significantly redevelop the existing SkyTrain station to improve appearance, fit and access
- Reorient entrance toward Commercial Drive (while retaining access from Broadway)

8. Greenway:

- Create a pedestrian greenway on the north edge of The Cut and a route for cyclists along 8th Ave to bypass the dangerous intersection at Victoria and Broadway.

2005 Transit Village Walkthrough & Workshop Results

On March 23 2005 the consultant team met with representatives of the stakeholder group (Translink, City of Vancouver, Coast Mountain Bus Company and SkyTrain) for a site walk-through followed by a workshop at city hall. The goal of the walk-through was to familiarize all parties with the site and to identify the issues that need to be addressed in the scope of this study. The workshop that followed gave each stakeholder and consultant the opportunity to express her/his specific concerns. City of Vancouver employees with relevant expertise joined us and provided background to the site as well as invaluable insight into the City's view of the site and surrounding precinct. At the conclusion of this meeting, all the issues raised were ranked in terms of importance with a 1 representing high importance. The compiled list of outcomes from the walkthrough and workshop is as follows;

High Importance

1. Future capacity needs of Broadway and Commercial Stations

- Current ridership is 20,000 SkyTrain boardings/day and 25,000 B-Line boardings/day
- Transit ridership will only increase over time and the system must be able to accommodate this.

2. Smaller scale improvements

- Many minor interventions to issues such as wayfinding, lighting, utilities and advertising can be made which will greatly affect the character of the precinct.

3. Community is oriented toward Commercial Drive

- The residents identify with Commercial Drive as the artery of their neighbourhood; therefore, shifting or adding an entrance to Broadway Station to a point off Commercial Drive is desirable.

4. Platform congestion and interchange issues at Broadway Station

- The location of the elevator at platform level congests the flow of passengers as they enter and leave the passerelle. As a result, passengers fill the first car of the westbound train and the remaining cars remain relatively empty.
- The elevator at grade is also a visual and physical obstacle to the station entrance.

5. Safety/security issues with the lane adjacent to Broadway Station

- The lane in its undeveloped form is a haven for crime/drugs and is a serious CPTED issue.

6. Encourage Safeway redevelopment to increase residential density in proximity to stations and the contribution of retail to neighbourhood (i.e. Could include moving Shopper's)

- Any redevelopment of the Safeway site should include a residential component to increase residential density in proximity to the stations. Smaller commercial shops could envelope Safeway to animate the street frontages and reduce the visual impact of the grocery retailer along the Broadway frontage.

7. B-Line loading on Broadway

- The large numbers of riders waiting for the 99 B-Line (currently 25,000 riders/day) congest the sidewalk creating an obstacle for those passing through the site.
- Existing transit shelter/protection provides insufficient weather protection and obstruct pedestrian flows and sightlines

8. #20 bus drop-off

- The existing #20 drop-off on the south side of Broadway unloads passengers mid block.
- The drop-off could be moved closer to 10th Avenue which would be closer to the possible new entrance off 10th Ave.

Medium-High Importance

1. Focus efforts on the south side of Broadway

- The north side of Broadway is sufficiently vibrant due to the integration of a retail/office component in the design of the entry to Commercial Station.
- The south side has a large portion of solid streetwall at Safeway and an unsightly alley adjacent to the Broadway Station entrance; therefore, our efforts should be focused there.

2. Pedestrian flow at Commercial Station

- Poor sightlines, multiple level changes, pedestrian flow direction changes and congestion make wayfinding extremely difficult.

3. 10th Avenue bicycle route

- Currently no bicycle storage is provided at the SkyTrain stations.
- The possibility of creating an entry/exit to Broadway Station off 10th Ave exists. This entry/exit could include a bicycle retail/storage opportunity.

4. Plaza at corner of Commercial & Grandview Highway North

- Currently the corner is enclosed by chain link fence and is a barrier to the extension of the bikeway on Grandview Highway North.

Medium Importance

1. B-Line unloading on Commercial Street bridge

- Access from the B-Line drop-off to the Commercial Street entrance to Commercial Station is narrow and difficult to navigate due to the long-term occupants of the bridge.

2. Establish/reinforce connections to bikeway/greenway

- The existing greenway beneath the Expo Line guideway terminates at an undeveloped area be-

tween 10th and 12th Avenues forcing users seeking Broadway Station to use the alleys or the sidewalk.

Medium-Low Importance

1. Expansion of Commercial Drive bridge for retail/commercial opportunities

- The bridge is a break in the vibrancy between the neighbourhoods located to the north and south.
- The opportunity exists to expand the width of the bridge to include a retail component to activate this space.

2. Plan for increased bus capacity

- Currently the layover space on Grandview Highway North is sufficient for 4 buses only.
- Ridership on the B-Line is expected to increase in the coming years which will require more buses to service it.

3. Mid-block crossing of Broadway

- A desire line exists between the Safeway site and the Shopper's site which requires pedestrians to j-walk

4. Development of lane

- The lane adjacent to Broadway Station contains clutter in the form of restaurant grease bins, dumpsters, utilities and parking stalls that would need to be cleaned-up as part of any redevelopment.

BROADWAY/COMMERCIAL TRANSIT VILLAGE PLAN

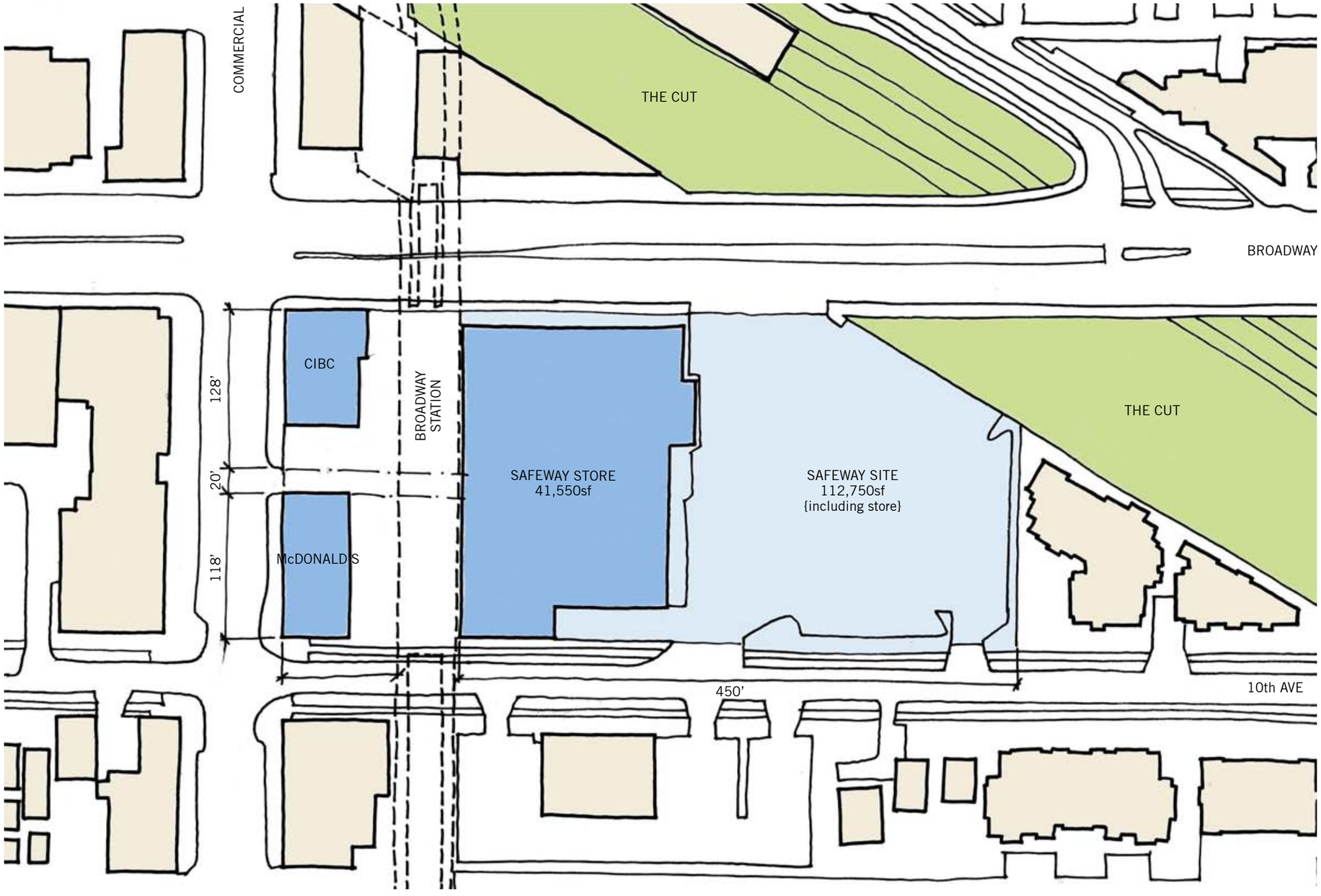
	Potential Improvments	Cost	General Conditions 8%	General Contractor's Fee - 5%	Subtotal	Design Contingency 10%	Escalation Contengency 13.50%	Near Term Options Total	Mid-Long Term Options Total
	Broadway Station								
1.0	Replace metal screens	$416,000	$33,280.00	$20,800.00	$470,080	$47,008	$63,460.80	**$580,549**	
	1.1 Relocate ticket vending machines (TVMs)								
	1.2 Relocate garbage cans								
	1.3 Remove hanging rail system								
	1.4 Selectively demolish concrete curb								
	1.5 New overhead rolling security screen								
	1.6 New canopy to north entrance								
	1.7 Remove metal screens and mullions - Concourse								
	1.8 Remove metal screens and mullions - Platform								
	1.9 Install new glazed curtain wall system at grade and platform level								
2.0	Relocation of elevator	$265,000	$21,200.00	$13,250.00	$299,450	$29,945	$40,425.75	**$369,821**	
	2.1 Reinforce platform structure for new elevator core								
	2.2 Construct new shaft and install redundant platform conduit								
	2.3 Install new elevator								
	2.4 Demolish existing elevator								
	2.5 Patch floor finish of former elevator opening								
3.0	New south entrance Broadway Station entrance	$188,000	$15,040.00	$9,400.00	$212,440	$21,244	$28,679.40	**$262,363**	
	3.1 Remove chain-link fence								
	3.2 Selectively demolish concrete curb								
	3.3 Remove exit stair and enclosure								
	3.4 Relocate existing tenants								
	3.5 Reinforce platform structure for new stair								
	3.6 New canopy to south entrance								
	3.7 Construct new stair & upgrade structural capacity of platform								
	3.8 New overhead rolling security screen								
4.0	Bicycle storage facility	$19,000	$1,520.00	$950.00	$21,470	$2,147	$2,898.45	**$26,515**	
	4.1 Construct new space complete w/ bike racks (70sm)								
5.0	Community Safety Office	$24,000	$1,920.00	$1,200.00	$27,120	$2,712	$3,661.20	**$33,493**	
	5.1 Construct new office space (80sm)								
6.0	2 bays of structural wall	$22,000	$1,760.00	$1,100.00	$24,860	$2,486	$3,356.10	**$30,702**	
	6.1 Selectively demolish concrete block wall w/ plaster								
7.0	Cover underside of passarelle	$665,000	$53,200.00	$33,250.00	$751,450	$75,145	$101,445.75	**$928,041**	
	7.1 Install steel frame and wood canopy								
8.0	Widen passarelle	$440,000	$35,200.00	$22,000.00	$497,200	$49,720	$67,122.00	**$614,042**	
	8.1 Extend width of passarelle								
	8.2 Relocate existing glazing to new passarelle edge								
9.0	Future side platforms & passarelle additions	$2,660,000	$212,800.00	$133,000.00	$3,005,800	$300,580	$405,783.00		**$3,712,163**
	9.1 Construct new side platforms								
	9.2 Construct new side passarelle structure								
	9.3 Install new glazed walls								
	9.4 Install new passarelle roofs								
	9.5 Construct vertical connections to the new passarelles on the north side								

BROADWAY/COMMERCIAL TRANSIT VILLAGE PLAN

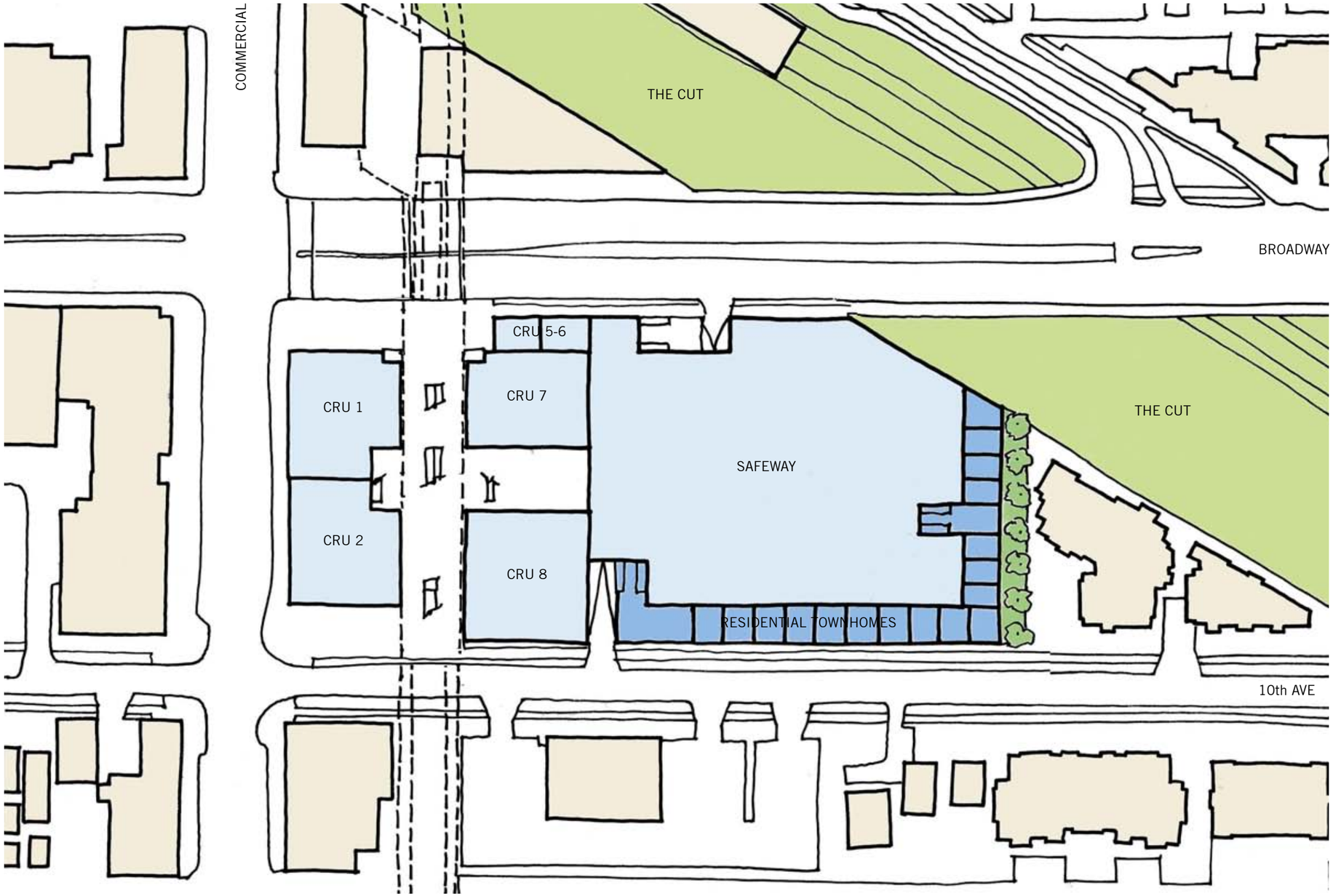
	Potential Improvments	Cost	General Conditions 8%	General Contractor's Fee - 5%	Subtotal	Design Contingency 10%	Escalation Contengency 13.50%	Near Term Options Total	Mid-Long Term Options Total
10.0	Modified roof structure	$355,000	$28,400.00	$17,750.00	$401,150	$40,115	$54,155.25		**$495,420**
	10.1 Selectively demolish portions of the existing roof								
	10.2 Install new skylights								
11.0	New roof structure	$4,410,000	$352,800.00	$220,500.00	$4,983,300	$498,330	$672,745.50		**$6,154,376**
	11.1 Remove existing hoop trusses								
	11.2 Install new roof that cantilevers over Broadway								
	B-Line & #9 Buses								
12.0	Weather protection for B-Line drop-off	$177,500	$14,200.00	$8,875.00	$200,575	$20,058	$27,077.63	**$247,710**	
	12.1 Construct new glazed canopy over Commercial Bridge sidewalk								
13.0	Weather protection for B-Line loading plaza	$222,000	$17,760.00	$11,100.00	$250,860	$25,086	$33,866.10	**$309,812**	
	13.1 Construct a glazed overhead canopy for plaza								
14.0	Weather protection for #9 loading area	$155,000	$12,400.00	$7,750.00	$175,150	$17,515	$23,645.25	**$216,310**	
	14.1 Canilever a glazed overhead canopy off building								
15.0	# 9 Layover & Operations Improvements	$1,080,000	$46,400.00	$29,000.00	$1,155,400	$65,540	$88,479.00		**$1,309,419**
	15.1 Road Construction	$350,000	$28,000.00	$17,500.00	$395,500	$39,550	$53,392.50		
	15.2 Trolly Infrastructure	$230,000	$18,400.00	$11,500.00	$259,900	$25,990	$35,086.50		
	15.3 SRW Acquistition	$500,000	N/A	N/A	$500,000	N/A	N/A		
	Commercial Station								
16.0	Expanded bridge plaza	$3,540,000	$283,200.00	$177,000.00	$4,000,200	$400,020	$540,027.00		**$4,940,247**
	16.1 New deck structure spanning The Cut								
	16.2 Paving pattern to match urban design treatment								
	16.3 Construct a glazed canopy over new plaza								
	16.4 Extend existing building to the north (330sm x 3 flrs = 990sm)								
	16.5 Construct new CRUs on the north edge of the new plaza (580sm)								
	16.6 Plantings to be included								
	Urban Design / Public Realm								
17.0	Consistent paving/urban design treatment	$240,000	$19,200.00	$12,000.00	$271,200	$27,120	$36,612.00	**$334,932**	
	17.1 Extend existing contrasting angled paving treatment to urban realm								
	17.2 Landscaping to accommodate public toilets & garbage enclosures								
	17.3 Pedestrian lighting and canopy to city lane								
	17.4 SRW acquisition through lane	$100,000	N/A	N/A	$100,000	N/A	N/A		
	17.5 Construct new dumpster enclosure								
18.0	Wayfinding elements	$200,000	$16,000.00	$10,000.00	$226,000	$22,600	$30,510.00	**$279,110**	
	18.1 Construct 4 wayfinding obelisks								
19.0	Public Art	$100,000	$8,000.00	$5,000.00	$113,000	$11,300	$15,255.00	**$139,555**	
	19.1 Neighbourhood and Station Public Art								
	NEAR TERM SUBTOTAL	**$3,133,500**	**$250,680**	**$156,675**	**$3,540,855**	**$354,086**	**$478,015**	**$4,372,956**	
	LONG TERM SUBTOTAL	**$12,045,000**	**$923,600**	**$577,250**	**$13,545,850**	**$1,304,585**	**$1,761,190**		**$16,611,625**
	GRAND TOTAL	**$15,178,500**	**$1,174,280**	**$733,925**	**$17,086,705**	**$1,658,671**	**$2,239,205**		**$20,984,581**

BASE CONDITION

SITE	AREA (ft2)
CIBC	11,840
McDONALD'S	10,815
SAFEWAY SITE	112,805
LANE	1,885
TOTAL	137,345
3.0 FSR TOTAL	412,035



10.4 APPENDIX D: DEVELOPMENT PHASING: EXISTING CONDITION



BASE CONDITION

SITE	AREA (ft2)
CIBC	11,840
McDONALD'S	10,815
SAFEWAY SITE	112,805
LANE	1,885
TOTAL	137,345
3.0 FSR TOTAL	412,035

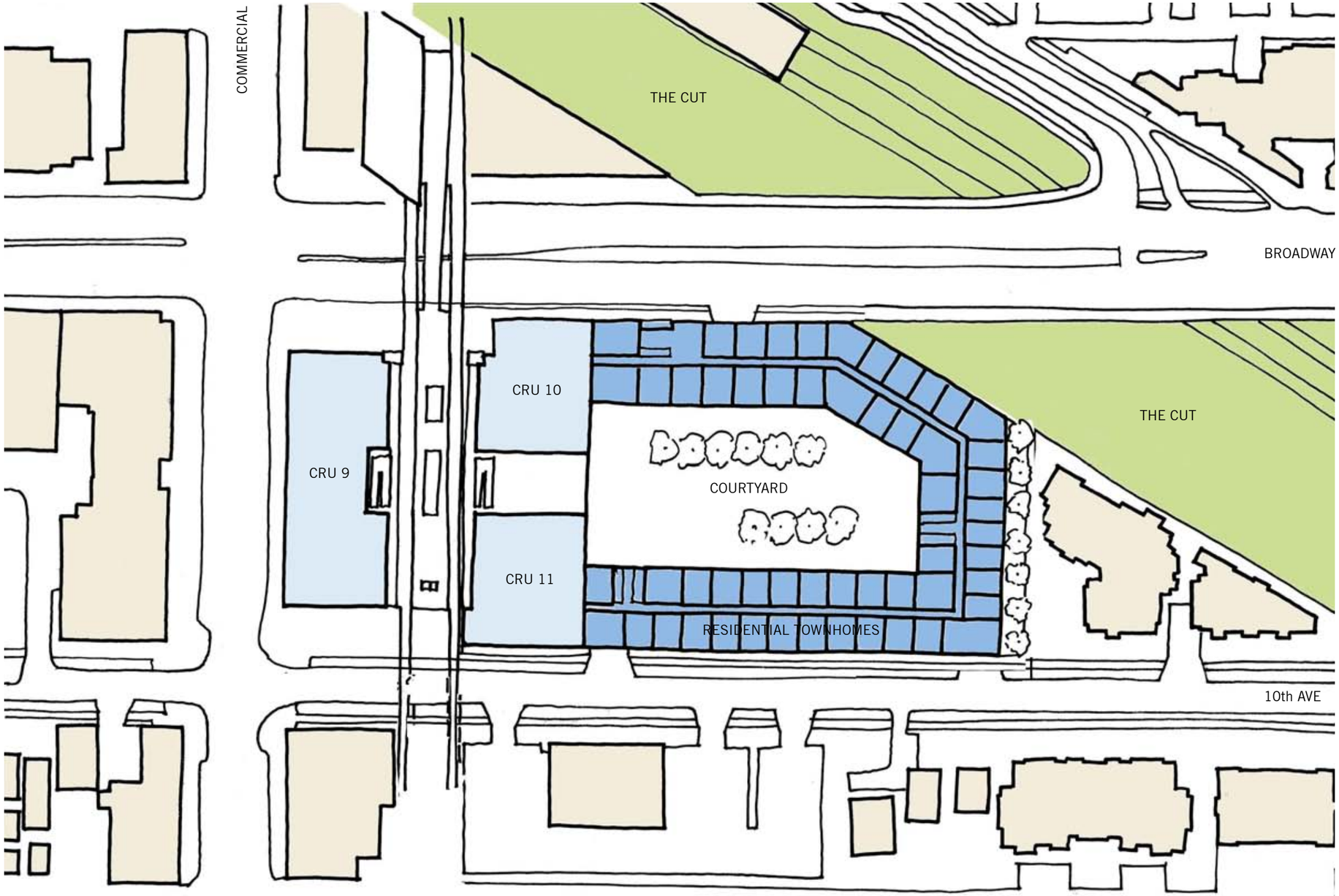
PROPOSED: LEVEL 1

PROGRAM	AREA (ft2)
CRU 1	8,396
CRU 2	8,548
CRU 3	7,493
CRU 4	10,441
CRU 5-6	2,217
SAFEWAY	63,788
RESIDENTIAL	17,383
TOTAL	118,266

SUMMARY TOTALS

LEVEL	AREA (ft2)
LEVEL 1	118,266
LEVEL 2	84,044
LEVEL 3-17	209,895
TOTAL	412,205

10.4 APPENDIX D: DEVELOPMENT PHASING: PROPOSED LEVEL 1



BASE CONDITION

SITE	AREA (ft2)
CIBC	11,840
McDONALD'S	10,815
SAFEWAY SITE	112,805
LANE	1,885
TOTAL	137,345
3.0 FSR TOTAL	412,035

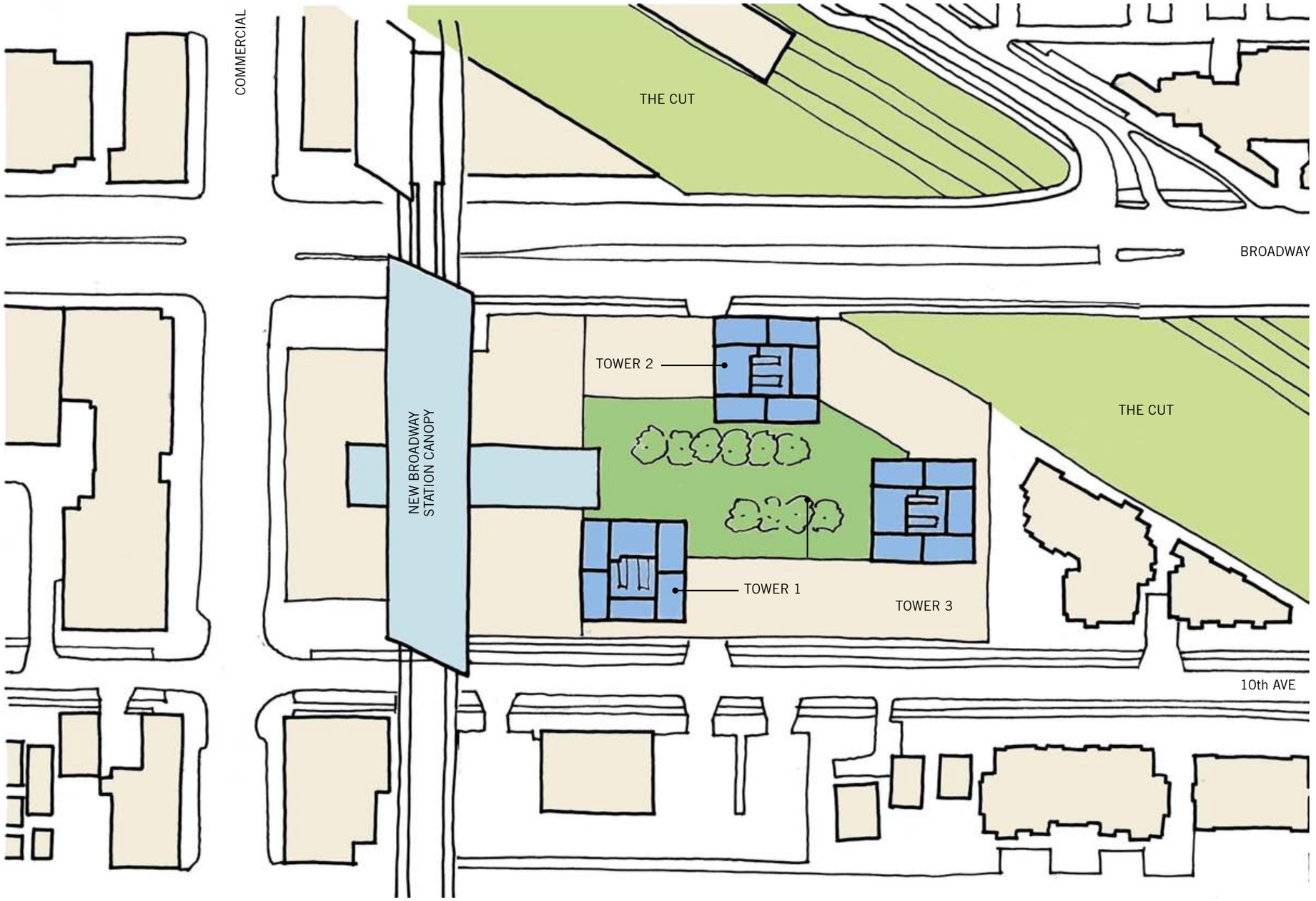
PROPOSED: LEVEL 2

PROGRAM	AREA (ft2)
CRU 9	15,855
CRU 10	9,149
CRU 11	9,838
RESIDENTIAL	49,202
TOTAL	84,044

SUMMARY TOTALS

LEVEL	AREA (ft2)
LEVEL 1	118,266
LEVEL 2	84,044
LEVEL 3-17	209,895
TOTAL	412,205

10.4 APPENDIX D: DEVELOPMENT PHASING: PROPOSED LEVEL 2



BASE CONDITION

SITE	AREA (ft2)
CIBC	11,840
McDONALD'S	10,815
SAFEWAY SITE	112,805
LANE	1,885
TOTAL	137,345
3.0 FSR TOTAL	412,035

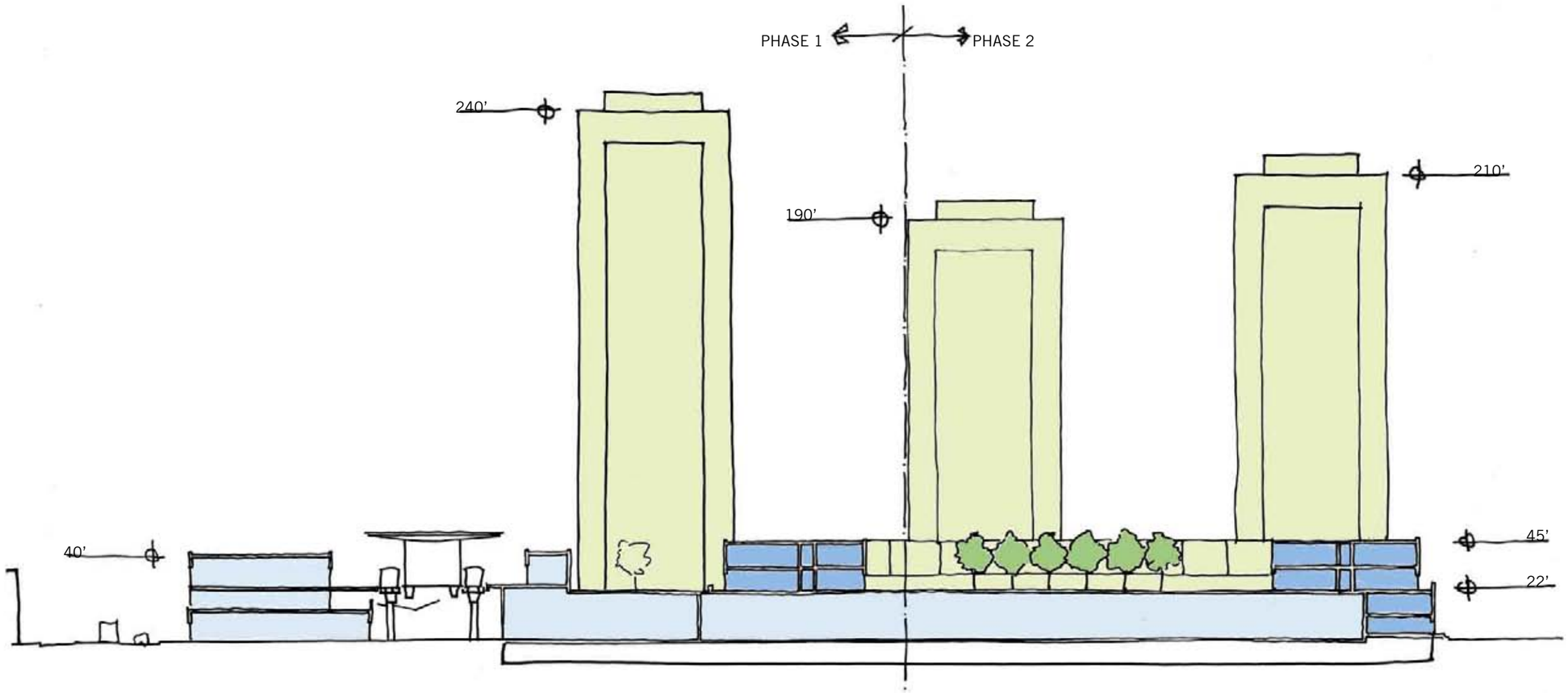
PROPOSED: LVL 3-17

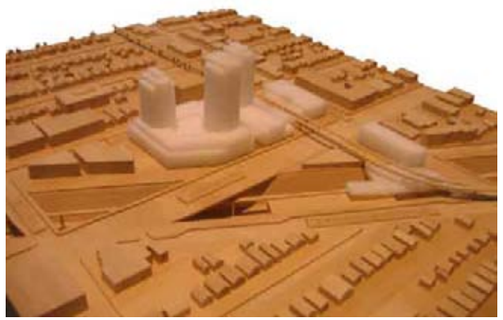
PROGRAM	AREA (ft2)
RESIDENTIAL	13,993(15)
TOTAL	209,895

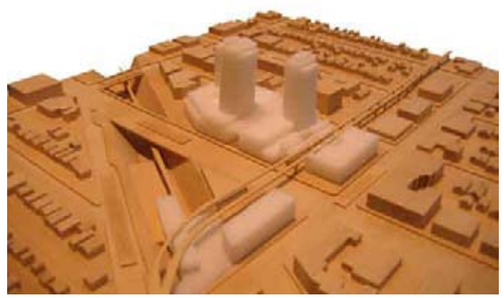
SUMMARY TOTALS

LEVEL	AREA (ft2)
LEVEL 1	118,266
LEVEL 2	84,044
LEVEL 3-17	209,895
TOTAL	412,205

10.4 APPENDIX D: DEVELOPMENT PHASING: PROPOSED LEVEL 3-17







10.4 APPENDIX D: DEVELOPMENT PHASING: SITE SECTIONS