



City of Richmond

Report to Committee

To: *Planning Comm. April 20, 2010*
Date: April 7, 2010

To: Planning Committee
From: Joe Erceg, MCIP
General Manager, Planning and Development

File:

Re: **Broadmoor Neighbourhood Service Centre Master Plan & New OCP Policies and Development Permit Guidelines: OCP Amendment Bylaw No. 8579 for 7820 Williams Road, 7980 Williams Road, 10151 No. 3 Road, 10060 Dunoon Drive and 10020 Dunoon Drive**

Staff Recommendation

- That Richmond Official Community Plan Bylaw 7100, Amendment Bylaw No. 8579 proposing text amendments to Schedule 1 of Richmond Official Community Plan Bylaw 7100 by establishing new OCP policies and Development Permit Guidelines for the Broadmoor Neighbourhood Service Centre Area, be introduced and given first reading;
- That Bylaw No. 8579 having been considered in conjunction with:
 - the City's Financial Plan and Capital Program; and
 - the Greater Vancouver Regional District (GVRD) Solid Waste and Liquid Waste Management Plans;
 be hereby deemed to be consistent with said program and plans, in accordance with Section 882(3) (a) of the Local Government Act;
- That Bylaw No. 8579, having been considered in accordance with OCP Bylaw Preparation Consultation Policy 5043, be referred to the Richmond School Board for informal comment prior to Public Hearing;
- That upon approval of the Bylaw 8579, the Broadmoor Neighbourhood Service Center Master Plan dated April 7, 2010, be approved.

Joe Erceg
 Joe Erceg, MCIP
 General Manager, Planning and Development
 Att. 13

FOR ORIGINATING DEPARTMENT USE ONLY			
ROUTED TO:		CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Affordable Housing		Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	<i>Joe Erceg</i>
Engineering		Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Parks Planning, Design & Construction		Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Development Applications		Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Transportation		Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Law		Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Community Energy		Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
REVIEWED BY TAG	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		REVIEWED BY CAO YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
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Staff Report

Origin

This report presents a unique approach to planning for the redevelopment of a portion of one OCP Neighbourhood Service Centre (NSC), the Broadmoor Shopping Centre. It was initiated by the developer (First Capital Realty Ltd.) who is interested in redeveloping part of the Shopping Centre now, before the OCP Update is completed in 2011. With Council's and Planning Committee's awareness and acceptance, the approach involves:

1. First, having City staff prepare Terms of Reference for the developer to undertake broad community consultation and then, with their consultants and City staff scrutiny, prepare a Master Plan for the Shopping Centre;
2. Second, having City staff review for acceptability, the studies and Master Plan;
3. Third, City staff preparing the proposed OCP amendment for Council's consideration and, if acceptable, approval, along with the Master Plan;
4. Fourth, proceeding with specific phased rezonings.

At the start of this process, City staff informed Council of the above via a February 19, 2009 memo (**Attachment 1**) which was discussed at Planning Committee on May 5, 2009.

The February 19, 2009 memo to Council memo stated that:

- "There are significant issues that the applicant must address before the application comes forward, including transportation as noted above, but also, how the entire Neighbourhood Service Centre area (Richlea, Broadmoor & Petrocan) might get redeveloped. This application is only for a portion of the existing Broadmoor Shopping Centre and until we understand how the entire centre could get redeveloped, we cannot support the application.
- Staff will be going back to the applicant to require a Master Plan for how the redevelopment of the entire Neighbourhood Service Centre could be done AND ask for all the landowners to agree on such a redevelopment plan. This will be difficult because the landowners have generally not cooperated between themselves."

With this City direction, the above Master Planning process proceeded.

The purpose of this report is to present a proposed: (1) OCP amendment and (2) Broadmoor Neighbourhood Service (Shopping) Centre Master Plan for Council's consideration and approval. These documents only apply to the redevelopment of the Broadmoor Shopping Centre. The other seven Neighbourhood Service Centres will need to await the completion of the OCP Update to see if, when and how they may redevelop.

Background

The "Broadmoor Shopping Centre" area is that portion of the area designated in the OCP as the Broadmoor Neighbourhood Service Centre (NSC). It is located on the southwest corner of No. 3 Road and Williams Road. The Neighbourhood Service Centre areas to the east and north east are not part of this report, the proposed OCP amendment or Master Plan.

The Broadmoor Shopping Centre is comprised of five commercial properties which are owned by three different owners, namely:

- First Capital Realty Ltd. which owns 3 properties at the Broadmoor Centre, in the north half, totalling approximately 1.41 ha. (3.5 ac.);
- Petro Canada which owns the Petro Canada gas station (1 property), at the northeast corner, totally approximately 0.246 ha. (0.61 ac.); and
- Richlea which owns one property, the Richlea Shopping Centre at 10151 No. 3 Road - the south half, totalling approximately 1.65 ha. (4.1 ac.).

The City of Richmond owns the servicing lane on the north west portion of the site from Williams Road to the Safeway store.

For the Broadmoor Shopping Centre, **Attachment 2** contains a more detailed summary of the affected five properties (e.g., ownership, existing density, zoning, density, site size, existing uses) and **Attachment 3** contains a map of the properties within the Shopping area and their ownership.

Context

The existing 1999 OCP has policies which enable Neighbourhood Service (shopping) Centers to redevelop. City staff are aware that Council is cautious about allowing any Neighbourhood Service Center redevelopment to occur, prior to the completion of the current OCP Update scheduled for completion in mid 2011, as Council is sensitive to possible community concerns regarding densification outside the City Centre.

Due to an expressed interest by the proponent in redeveloping part of the Broadmoor Shopping Centre at this time, the City (as outlined above) indicated to the proponent that, if they agreed to first consult with the Broadmoor community, prepare a Master Plan based on City established Master Plan Terms of Reference (**Attachment 4**) and obtain community and Centre owner support for the Master Plan, the City would consider establishing OCP policies which would enable the Broadmoor Shopping Centre to redevelop, prior to the completion of the OCP Update. The proponent agreed. The result is the proposed Master Plan and OCP amendment.

Chronology of Broadmoor Shopping Centre Property

Pre City Master Plan Requirement Activity

Over the last few years, there have been a number of rezoning and development applications on the Broadmoor Mall portion of the Shopping Centre site, namely:

- In June 2006, rezoning application RZ 06-340370 was received to remove the Pub and Sales (CP2) zoning and the associated Pioneer's Pub to make room for a new retail anchor tenant. The application was withdrawn and a new lease secured to accommodate the Pub.
- In February 2008, First Capital Realty submitted a rezoning and Development Permit application (RZ 08-410730 and DP 07-378677) to redevelop the western portion of Broadmoor Mall (near Williams Road and Dunoon Drive into a mixed-used development. *(Note: This rezoning proposal will be considered at the same meeting as the subject report.)*
- In 2008, a Development Permit DP 09-464198 was received, and in June 2009 a DP (Phase 1) was issued to renovate the facades of the east wing and make improvements to surface parking fronting onto No. 3 Road. There was no change to the building footprint.

- Between October 2008 and January 2009, First Realty engaged the Broadmoor community about the possible redevelopment of the western portion of their site, and held a Public Open House in the neighbourhood to inform residents about the proposed development and to gauge response to additional truck traffic along Dunoon Drive.

With The City's Master Plan Requirement

In February 2009, the City advised First Realty Ltd. that a more comprehensive community consultation process and Master Plan would be first required for the entire Broadmoor Shopping Centre site, in order to provide an overall planning framework to guide the redevelopment process over various phases of redevelopment. The City also requested that First Realty Ltd. seek the agreement from the other Shopping Centre owners: Richlea and Petro Canada. The proponent agreed.

Broadmoor Shopping Centre Master Plan Terms of Reference

In March 2009, the City developed a Terms of Reference (TOR) for the Broadmoor Shopping Centre Master Plan to guide the Master Plan process and requested that First Realty Ltd. address all the items within the TOR.

The purpose of the TOR was to provide a planning framework by which:

- For Developers, they:
 - could voluntarily conduct community consultation, studies and prepare a Master Plan for the Broadmoor Shopping Centre; and
 - based on the Master Plan, could prepare specific proposals to redevelop the Shopping Centre in phases;
- For The Community, they:
 - could have certainty regarding the process and their input;
- For The City, it:
 - would define the topics and issues which needed to be addressed, and
 - would have an appropriate OCP planning framework which reflected the community's preferences and could be used to assess the appropriateness of specific phased Shopping Centre redevelopment proposals.

The key tasks outlined in the Master Plan Terms of Reference were to:

- establish a City overall planning framework for phased development;
- involve the community through extensive public consultation;
- develop a vision, goals objectives, vision, principles and a preferred land use concept for the evolution of the Broadmoor Shopping Centre;
- set out basic Centre design guidelines and site relationships for future development;
- address Centre transportation, parking, servicing, sustainability, affordable housing, child care, park, beautification and community planning service requirements; and
- identify and provide mechanisms for developers' contributions.

Broadmoor Shopping Centre Master Plan Public Consultation

First Capital Realty undertook a public consultation process with the local community, business owners and stakeholders (e.g., two elementary and two secondary schools, South Arm Community Association; Richlea Square and Broadmoor Mall owners and tenants). Information was made available via a website, distribution of a neighbourhood newsletter and survey to 4,005 residents. A Public Open House was held on September 29, 2009, and advertised in both local newspapers and via mail drops.

The purpose of the Open House was to:

- Introduce the Master Plan process and collect the neighbourhood survey responses;
- Present a draft vision and general guiding principles for the long term redevelopment of the Master Plan Area; and
- Introduce two preliminary concept plan options: Preferred Concept 1 (**Attachment 5**) and Concept 2 (**Attachment 6**).

Generally, the public supported Concept 1 and the proposed Master Plan is based on a modification of Concept 1. A detailed overview of the consultation process and results of community feedback are appended in the Broadmoor Master Plan.

Highlights of the Master Plan Process Community Survey Responses

The highlights of the community's survey responses are below:

a) What residents like most about the Broadmoor Shopping Centre:

- Broadmoor Mall is close to home (75%)
- Range of shopping options (42%)
- Safeway/grocery store as an anchor (42%)
- Access to Transit (23%)
- Bakery (18%)

b) Key issues that the community wants addressed by Centre redevelopment:

- Traffic and parking concerns (27%)
- Out-dated/unattractive appearance of the Centre (22%)
- Mall not being pedestrian-friendly (16%)
- Lack of services (14%)

c) Key suggestions for improving the Broadmoor Centre:

- Improve appearance (24%)
- Improve parking (18%)
- Provide greater variety of stores and restaurants (15%)

d) Types of land uses most supported are:

- Retail (61%)
- Mixed Use (e.g., commercial at grade with residential above (48%)
- Low rise apartment, 6 storeys or less (32%)
- Office (27%)
- Townhouse (16%)
- No residential (11%)

Based on the consultation and survey findings, in general, responding residents indicate that they are in favour of the proposed Master Plan elements (e.g., vision, concept, planning principles). Most residents indicate a preference for improved retail outlets (e.g., fresh produce). The most highly preferred type of development is for more retail uses, followed closely by mixed use (apartments above commercial at grade). Most residents support building heights of 6 storeys or less, or townhouses.

Consultation with Broadmoor Shopping Centre Owners

As requested, the Consultant consulted with other Centre owners (Richlea and Suncor [Petro Canada]), for over a year (**Attachment 7**). Both were willing to do so, as long as their long term interests are not compromised. (See more discussion below). In summary, the Centre owners support the Master Plan, as it balances certainty with flexibility.

City's 2009 OCP Update Public Consultation Survey Results

The results from the City's 2009 OCP Update Survey distributed in November 2009 indicate a high level of City resident support for redeveloping shopping malls with mixed uses (e.g., residential uses on top of commercial). Out of 439 survey responses to the statement in Question 19: "*Allow more types of residential housing within and around shopping centers as mixed use developments (along with office and retail) to strengthen neighbourhoods,*" - 332 (75%) either strongly agreed (141 responses) or agreed (191 responses) with this statement. Only 49 (11%) of respondents disagreed (22 respondents) or strongly disagreed (27 respondents) with the survey statement.

Findings of Fact

The OCP definition of a Neighbourhood Service Centre is:

"Those areas of the City which are intended to accommodate the shopping, personal service, business, entertainment, recreational, and community facility and service needs of area residents, and may include residential uses."

The Broadmoor Shopping Centre is a portion of one of eight commercial nodes in Richmond that are designated as Neighbourhood Service Centre (NSC) in the OCP. Residential uses exist in two of the Neighbourhood Service Centres. The NSC at the intersection of Williams Road and Shell Road and the NSC at Terra Nova both have ground-oriented multiple family housing. To date, there has been no mixed use (e.g., residential over commercial) development in the NSC commercial nodes.

Surrounding Development

- North: Williams Road, a minor arterial with some transit service runs along the northern edge of the site. Across Williams Road is a 29-unit, two storey townhouse development fronting onto Williams Road and No. 3 Road, zoned "Low Density Townhouses (RTL1)";
- East: No. 3 Road, a major arterial and OCP designated transit corridor. Across No. 3 Road, to the east, is a three-unit commercial property and a 100-unit, three-storey apartment building fronting onto Williams Road and No. 3 Road, zoned "Local Commercial District (CL)" and "Medium Density Low Rise Apartments (RAM 1)" respectively.

- There is also an existing 308-unit, three-storey apartment complex fronting onto both No. 3 Road and Ryan Road, zoned “Low Density Low Rise Apartments (RAL 1)”;
- West: Dunoon Drive, a local road and across Dunoon Drive a single family residential area, zoned “Single Attached (RS1/E)” and a shared park-school site called Maple Lane Elementary School and Park.
- South: An 87-unit townhouse development which is under a Land Use Contract (LUC) 022.

Related Policies & Studies

Official Community Plan

- 1999 Official Community Plan (OCP) designation: “Neighbourhood Service Centre” on the Specific Land Use Map, Attachment 2 to Schedule 1.
- Existing broad 1999 OCP policies for Neighbourhood Service Centre redevelopment emphasize fostering a “village” character and enhancing them by:
 - encouraging services and amenities to cluster in their vicinity;
 - improving the pedestrian, bike, wheelchair and scooter-friendliness of these centers;
 - achieving a main street gathering place for the surrounding neighbourhood;
 - encouraging the development of small, pedestrian-friendly, street front convenience and personal service facilities on major roads to complement Neighbourhood Service Centres and meet the needs of surrounding residents;
 - discouraging strip malls and big box retail uses;
 - encouraging local transit service to connect to the local gathering places (e.g., along Williams Road to the South Arm Community Centre and Broadmoor Shopping Centre);
 - The intersection of No. 3 Road and Williams Road and the Broadmoor Neighbourhood Service Centre is referred in the OCP (4.1 Road Network) as a “Priority Area” where distinctive design features in the road network are to be provided to complement neighbourhood character and to emphasize landmark locations. The design of roads at landmark locations (gateways, entrances to neighbourhoods, etc.) is to be integrated with civic beautification elements such as public art, special boulevard trees, and other decorative features.
- The relevant OCP policies for the area around the Broadmoor Neighbourhood Service Centre area include: (1) achieving low density residential development – along Williams Road (between Gilbert and No.3 Road) and along No. 3 Road south of Francis Road to Williams Road; and (2) improving the community’s identity, through a more coordinated pedestrian scale.

Broadmoor Neighbourhood Service (Shopping) Centre Master Plan Concept

The preferred Master Plan Land Use Concept in (**Attachment 8**) identifies proposed land uses, building heights, primary and secondary vehicular circulation, primary and secondary pedestrian corridors, key gateways and the location of privately owned but publicly accessible green space. The summary below provides additional information about the long-term build-out of the Broadmoor Shopping Centre:

Proposed Broadmoor Shopping Centre Land Use Concept Requirements			
	General	Residential	Commercial
Master Plan Site Area	33,624.5 m ²	60%	40%
Total Built Area	40,114 m ²	20,988 m ² exclusive of parking	11,674 m ² exclusive of parking
Floor Area Ratio	- 0.5 FAR base - 1.5 FAR maximum		
Number of Dwelling Units	n/a	approximately 225 units	n/a
Additional Population	Between 535 – 675 people @ an assumed ratio of 2.5-3 persons per household		
Privately Owned Open Space	1,600 m ² (0.16 ha)		
Structured Parking	10,565 m ²		
Heights vary	2 - 6 storeys (24.3 m; 80 ft.)		
Proposed Residential Flood Elevation Level	2.9 m elevation		
Proposed Commercial Flood Elevation Level	0.3 m above the crown of fronting street		

Broadmoor Neighbourhood Service Centre Master Plan

The Broadmoor Neighbourhood Service Centre (i.e., the Broadmoor Shopping Centre) Master Plan (**Attachment 9**) contains demographic data, the public consultation program and materials, a Centre vision, guiding principles, land use, height, density and sustainability policies, urban design guidelines, transportation requirements, a servicing capacity analysis and implementation program. The Master Plan is to be used to guide redevelopment decisions (e.g., rezonings, DP Permits).

The Centre is envisioned to become a more vibrant, accessible, and sustainable compact mixed use hub with a mix of housing, shops and services. The Centre will be the “heart” of Broadmoor where people will be able to live, work, and meet their daily needs. **Section 11** of the Master Plan contains extensive design guidelines that will guide the redevelopment of the site and some highlights are:

- heights (4 to 6 storeys) are greatest along No. 3 Road and the northeast corner of the site at Williams and No. 3 Road, where development of a public urban space and building architectural features will establish a landmark at this intersection;
- residential units are located above commercial units and townhouse forms front Dunoon;
- local and sustainable products are used wherever possible (e.g., wood, recycled materials);
- a series of pedestrian connections, nodes and gateways have been defined;
- two landmark gateways at Williams and No. 3 Road and the south entrance along No. 3 Road;
- two open space nodes (privately owned but publicly accessible), one of which will front Dunoon and the second node one will be a central plaza within the Shopping Centre area connected by pedestrian access routes;
- approximately 225 residential units are proposed for the Master Plan at build out;
- 4 major primary and one secondary pedestrian connections have been identified for the site including:
 - a centrally located, landscaped pedestrian spine that extends parallel to the No. 3 Road E-W Major Gateway entry which will include decorative pavement and a double row of trees; and

- a N-S internal pedestrian corridor between Williams and the two main E-W primary pedestrian corridors connecting through the site
- an extended pedestrian realm (sidewalks and enhanced landscaped boulevard) are provided around the site on Williams, Dunoon, and No. 3 Road.

Form and Character

Buildings will be arranged to create a functional mixed use node with a more urban character and respond appropriately to the adjacent neighbourhood context. Buildings will vary in height from two to six storeys and contain a variety of commercial spaces and residential units. The total commercial area will remain more or less the same as the existing commercial floor space. The highlights include:

- The character will reflect a contemporary design that integrates durable and natural materials;
- More pedestrian oriented public spaces, pedestrian paths and links to adjacent neighbourhoods;
- Heights are to be the greatest along No. 3 Road and the northeast corner of the site at Williams and No. 3 Road where development of a public urban space and architectural features will establish a landmark at this intersection.

Gateways and Pedestrian Connections

- To create a neighbourhood core that invites and welcomes the community, a series of pedestrian connections, key gateways and open space nodes have been defined;
- Two gateways and two open space nodes are to be connected by pedestrian corridor and vehicle access routes;
- Four vehicle entries four pedestrian routes are proposed.

Open Space Node at Dunoon

A public green space (privately owned) fronting on Dunoon is envisioned as a green outdoor space that provides a place for social interaction, seating and enhances the quality of the urban environment;

Central Open Space Node

A central space/structure (kiosk and plaza) will be located in the central parking area to break the paved parking surfaces into smaller parking clusters;

Accessibility

The Master plan provides an opportunity to improve accessibility within the site and to better integrate the Shopping Centre to the neighbourhood by the following:

- a) Integration of the Shopping Centre with the surrounding neighbourhood
 - By incorporating improved pedestrian entry ways and pedestrian corridors from Maple Lane Park to the site (e.g., the public green space node fronting onto Dunoon to allow better pedestrian access);
 - Providing wider front yard setbacks along the southern portion of the site along Dunoon to increase visibility of the Shopping Centre from Maple Lane Park;
 - Providing an improved pedestrian crossing at Dunoon and Williams Rd; and

b) Accessibility within the Shopping area

- Primary and secondary pedestrian corridors through the site which are well defined through a combination of surfaces, colour, landscape features, signage, seating, and human-scale lighting and separated, where feasible, from parking areas, and driveways;
 - A centrally located, E-W landscaped pedestrian spine from the No. 3 Rd. entry to Dunoon Drive and includes double row of trees, boulevard and 2.5 m wide paved path;
 - A second primary pedestrian corridor to the central plaza node from the northern access on No. 3 Road which will extend along the internal storefronts and include raised crossings where vehicles cross its path;
 - A N-S internal pedestrian primary pedestrian corridor between William and the two main E-W pedestrian corridors;
 - A secondary pedestrian corridor to be extensions of the Primary Corridors and complete the pedestrian circulation network and extend along the internal and external frontages of the residential and commercial buildings;
- Pedestrian routes are universally accessible (e.g., curb cuts and level entry ways) and can accommodate a range of uses;
- A central plaza node to act as an organizing space within the central surface parking area and organize the parking area vehicular circulation; and
- Minimum universal housing standards within units to ensure ready access, use and occupancy by a person with a disability or to age in place.

Sustainable Infrastructure and Green Buildings

The Broadmoor Master Plan promotes innovative sustainability approaches. Developments will incorporate a comprehensive green building and infrastructure strategy that addresses on-site rainwater management, energy efficiency, renewable energy production, potable water conservation and waste minimization. At the minimum, the buildings will meet LEED Silver Certification or equivalency, including the LEED Storm Water Management Credit and the LEED Heat Island Effect: Roof Credit.

Proposed Redevelopment Phasing

Due to market conditions, multiple property owners, leasing agreements with tenants on the site and redevelopment phasing, the implementation of the Master Plan is anticipated to occur in phases as indicated below (also see a phasing plan map **Attachment 10**). The following shows the anticipated order and approximate timeframes that redevelopment may occur over the next 30 years:

- Phase 1 (completed): First Realty alters the facades of the east wing of the Broadmoor Centre (2011);
- Phase 2 (in process): First Realty redevelops the north western portion of the Broadmoor Centre site (2011);
- Phase 3: First Realty may redevelop the north eastern portion of Broadmoor Centre site (2024);
- Phase 4: Richlea may redevelop (TBD);
- Phase 5: Petro Canada may redevelop (TBD).

*Staff Comments – Technical Review*Developers Contributions

- For Affordable Housing: City staff recommend that developers contribute to affordable housing through density bonusing, as per the Council approved Affordable Housing Strategy;
- For Child Care: City staff recommend that developers contribute to enhancing existing City facilities through density bonusing (e.g., \$1.00 per buildable sq. ft.);
- For Broadmoor Neighbourhood Beautification: City staff recommend that developers contribute to beautification through density bonusing (e.g., \$0.75 per buildable sq. ft.);
- For Community Planning Services: City staff recommend that developers contribute to community planning services through phased development agreements or other means (e.g., voluntary contributions) (e.g., \$0.25 per buildable sq. ft.);
- For City Park Contributions: City staff indicate that that the proposed Centre redevelopment residents will not require new additional City parks. Instead, developers will be required to contribute through DCCs for City park space elsewhere;
- For Public Art: Encouraged and voluntary at \$0.60 per buildable square foot;

Privately Owned - Publically Accessible Park Space

The Master Plan proposes privately owned park space (e.g., 0.16ha/0.39 acre) located in two areas within the Shopping area which will be maintained privately. The open space will be provided by future developers (e.g., in Phase 3 and 4) and they are compensated by receiving the same redevelopment density as other Centre developers.

While the Broadmoor Local area has a shortfall (29 acres) in required open space based on the city-wide standard of 7.66 acres/1000 residents, the immediate area of the proposed development is well served by the 11-acre Maple Lane Neighbourhood Park immediately to the west. The additional 0.16 ha of privately owned, publicly accessible open space proposed in the Master Plan will serve both the expected 500 to 675 new residents in the new Centre area as well as provide much-needed visibility to Maple Lane Neighbourhood Park from No. 3 Road. The park land acquisition and development DCCs which will result from this development will assist in meeting other development and acquisition priorities in the Broadmoor area and across the City.

Engineering – Capacity Analysis at Build-Out

A requirement of the Master Plan was for the proponent to undertake a capacity analysis of the engineering infrastructure servicing (sewer, storm and water) of the Broadmoor Shopping Centre based on existing and ultimate land uses, to determine the capacity and required upgrades.

- Sanitary Sewer: Through the Servicing Agreement in Phase 2, First Capital Realty will be required to:
 - upgrade existing sanitary sewer along south side of Williams Road, on the east side of Dunoon;
 - remove the existing north-south aligned sanitary sewer within the lane;
 - remove the east-west aligned sanitary sewer within the right-of-way and
 - install a 200 mm sanitary sewer along Williams Road and along Dunoon.

The analysis of future Master Plan redevelopment concludes that the ultimate sanitary upgrade will generally remain the same as that required in Phase 2.

- Storm Sewer: Through the Servicing Agreement in Phase 2, First Capital will be required to upgrade and relocate the existing storm sewer on Dunoon and on Williams Road. An analysis of the future development of the site concludes that the ultimate upgrade scope remains the same as that required in Phase 2.
- Water Capacity/Site Water: The proposed developments will not require a higher water pressure than what is available for fire-fighting purposes. The existing public watermain system, currently and ultimately will have adequate available flow to accommodate the future development as proposed in the Master Plan.

As redevelopment occurs, rezoning applications and reports will outline the various rezoning considerations and requirements that must be addressed by each developer, and will be included in servicing agreements and other City mechanisms. These will be addressed to the satisfaction of the Director of Engineering, and other City staff, prior to rezoning adoption.

- Alternative Energy Management:
 - In order to address alternative energy requirements of phased proposals, developers will be required to look at opportunities to integrate alternative energy supplies into their building design and mechanical systems as outlined in the Master Plan;
 - Energy and Communication utilities will be located underground, where possible;
 - BC Hydro, Telus, and Shaw Cable have identified new utility pole requirements and underground servicing ducts to service the sites. These utilities will be under a Municipal Access Agreement and/or in a ROW registered by the utility company.
- Flood Plain Construction Levels
Broadmoor Shopping Centre redevelopment presents an opportunity to meet Richmond's current minimum recommended flood habitable floor elevation standards. The existing average site elevation is approximately 1.1 m geodetic. Redevelopment will provide the following minimum habitable floor elevations:
 - for residential uses, the minimum habitable floor elevation level shall be 2.9 m (9.5 ft.); and
 - for all other uses, the minimum habitable floor elevation of a building shall be 0.3 m (1.0 ft.) above the crown of the fronting street.
- Transportation
Bunt & Associates conducted a Transportation Study (**Attachment 11**) for the Broadmoor Neighbourhood Service Centre Master Plan area, and looked at all redevelopment phases over a long term (e.g., 2031) time horizon. The study:
 - involved a traffic impact assessment for each phase to build out to verify the traffic conditions in the long-term;
 - identified the required off-site improvements;
 - reviewed on-site circulation and provisions for pedestrians, bicycles and parking;
 - assessed the Transportation Demand Management (TDM) principles to support the overall planning and sustainability objectives.

Transportation Study - Major Findings

At Build-Out:

- The signalized intersection at No. 3 Road and Williams Road will continue to perform satisfactorily over the long term;
- The north access on No. 3 Road will be restricted to right in/right out and the control method on the South access to No. 3 Road will be upgraded with a new traffic signal;
- The No. 3 Road/Ryan Road intersection will not need to be upgraded from a pedestrian signal to a full traffic control signal in Phase 2, but will be reviewed at future development phases in conjunction with design of site accesses on No. 3 Road;
- An existing crosswalk located near Dunoon Drive on Williams Road will be upgraded to a "Special Crosswalk" during Phase 2;
- Pedestrian and Bicycle Connections: The Broadmoor Neighbourhood Service Centre Master Plan redefines the pedestrian and bicycle connections, nodes and gateways through the site to form an integrated development concept. Direct, safe and attractively pedestrian corridors/routes are to be provided from the main entrances of the commercial areas and residential lobbies to the nearest bus stops. The pedestrian paths, including those through the parking lot, with clear, safe and proper crossing facilities are also provided.
- Transit: The Broadmoor Master Plan area is well served by transit. Additional transit service along Williams Road is encouraged to link the community with the Broadmoor Shopping Area.
- It is recommended that existing transit services in the adjacent area be further reviewed as and when necessary to reflect the changes in travel patterns after the opening of the Canada Line;
- Vehicular Access: Existing site accesses on No. 3 Road, Williams Road, and Dunoon will be consolidated through redevelopment;
- If the gas station redevelops, driveways associated with the gas station on No. 3 Road and Williams Road will be consolidated with other entrances which will reduce potential vehicular conflicts near the intersection of No. 3 Road and Williams;
- Commercial traffic (including all servicing trucks) will ultimately access the site via the arterial streets and not on Dunoon if and when the Richlea (Safeway site) redevelops. Existing loading areas accessed from Dunoon will be eliminated in subsequent phases;
- The internal traffic layouts will define a pedestrian route network to minimize potential conflicts with vehicular traffic.
- Due to the fact that peak parking demands from commercial and visiting residential parking do not occur at the same time, reducing the required parking by 10% (allowed under the Parking By-law with adequate TDM measures) will not cause undesirable impacts.
- Access from No. 3 Road: There will be two access entries from No. 3 Road to the Broadway shopping area. Ultimately, when Phase 3 is developed, there will be right-in-right-out operation at the north access and a 3 or 4-way traffic signal will be provided at the south access.

Study Transportation Demand Measures (TDM)

The total parking requirement (both residential and commercial) for the proposed Broadmoor shopping area plan is 295 parking stalls based on the City of Richmond's parking bylaw after allowing shared parking (13 stalls) arrangements. The Broadmoor Master Plan proposes a

total of 267 parking stalls, which is within the allowable 10% maximum parking reduction with the implementation of achievable TDM measures.

The Broadmoor Master Plan proposes the following TDM measures, which the City considers acceptable:

- Car-sharing: One car co-op vehicle will be purchased by First Realty Ltd. and be available for the residents of the Master Plan area. At Phase two, the applicant will purchase the co-op vehicle and provide any associated maintenance and insurance fees. Parking spaces for car sharing vehicles will be provided close to a residential unit.
- Transit: In Phase 2, the applicant will install two bus shelters along No. 3 Road and/or Williams Road at the developer's cost. The applicant will consult with TransLink and Coast Mountain Bus Company as to the best way to promote bus services in the area.
- A Mini Transit Plaza/Lay-By: For build-out, a mini transit plaza should be considered within the First Capital site to accommodate existing and future bus stops and lay-bys.
- Bicycle Facilities: Enhanced end-of-trip bicycle facilities will be provided for each development phase within each of the buildings. They will be located close to the bicycle storage rooms and bike racks. These facilities include showers and changing rooms. Direct and safe bicycle paths to/from the future bicycle storage rooms and the existing Williams Road on-street bicycle lanes will be provided.
- Neighbourhood Traffic Calming:
In consultation with nearby residents, traffic calming measures may include: corner bulges on Dunoon Drive to narrow the traffic lane width, a shorter crosswalk distance and reduced vehicle speed; a marked crosswalk at Dunoon Drive south of Petts Road with a 30 km/h sign approaching the park/playground; and speed humps on Nevis Drive and Petts Road. Traffic calming study is to be conducted to understand the local residents' concerns, to identify the change in the number of on-street parking and to assess whether the suggested traffic calming measures are warranted. These traffic calming measures will be at the developer's cost.

Additional transportation studies will be required for each rezoning application to assess:

- parking demand;
- current best practises of Transportation Demand Measures; and
- the need for additional off-site transportation improvements for pedestrians, cyclists and vehicles.

Analysis

Overview

The staff review of the Broadmoor Master Plan indicates that it: (1) complements and enhances existing OCP policies, (2) acceptably addresses of the Broadmoor community's preferences, (3) has the support of the Centre owners and (3) supports the City's 2009 OCP Update community survey findings.

The Existing 1999 OCP

The existing OCP designates the Broadmoor Shopping Centre as a "Neighbourhood Service Centre". The intent of this OCP designation is to allow the gradual introduction of mixed uses (e.g., residential with commercial uses) to create a pedestrian oriented mixed use community

which serves the day to day shopping, live, work and play needs of community. The Broadmoor Master Plan promotes a shift away from car focussed uses to forms of development that:

- are more compact and pedestrian-friendly;
- provide for a more vibrant, diverse mix of multiple family housing choices;
- provide more variety of pedestrian-oriented commercial uses, green space and community amenities;
- provide for green building and green infrastructure;
- better balances commercial and new residential space;
- follow an orderly phased development and community consultation approach;
- promote sustainability objectives; and
- provide transportation improvements.

Proposed Official Community Plan (OCP) Policies

The proposed OCP policies for the Broadmoor Neighbourhood Service Centre implement the Master Plan and guide the long term, phased redevelopment of this Neighbourhood Service Centre. These proposed OCP Broadmoor policies apply only to the Broadmoor Neighbourhood Service Centre. The other seven Neighbourhood Service Centres will need to await the completion of the OCP update (e.g., in 2011), to see if, when and how they may redevelop. Shopping Centre redevelopment will be market driven, phased and subject to further community input (e.g., through rezoning public hearings for phases), City analysis and Council approvals.

Highlights of Proposed OCP Policies

(1) Vision:

The long term Broadmoor Neighbourhood Service Centre Vision is to be:

“A vibrant, accessible and sustainable mixed use hub where people will be able to live, work and meet their daily needs.”

(2) Consistency with the Master Plan:

The redevelopment (e.g., rezonings, Development Permits, Building Permits) of the Broadmoor Shopping Centre is to be consistent with the OCP policies and Development Permit Guidelines, and decisions are to be guided by the Council approved Broadmoor Neighbourhood Service Centre Master Plan (i.e., Master Plan) dated April 7, 2010.

(3) Flexibility

Over the possible 30 year redevelopment period, as the Shopping Centre redevelops, owners clarify their proposals, more specific technical studies are completed and requirements become better known, Council may modify the OCP policies and Master Plan, as necessary.

(4) Mix and Range of Land Uses:

- Generally, the mix of land uses will be 60% non residential (e.g., commercial) and 40% residential;
- Shopping Centre land uses are to be consistent with those defined in the OCP definitions (e.g., Neighbourhood Service Centres which allow shopping, personal service, business, entertainment, recreational and community facility and service uses which meet the needs of area residents and residential uses).

(5) Density:

- Base: The base density will be 0.5 Floor Area Ratio (FAR);
- Maximum Density: The maximum overall density will be 1.5 FAR, and minor density variations across the site may be allowed, subject to Council approval.

(6) Building Height:

Generally, the maximum building height of the redeveloped Shopping Centre will not exceed 6 stories (24.3 m; 80 ft.) and the whole Centre area is not to be redeveloped to 6 storeys (e.g., 6 stories along the arterials, lower elsewhere).

(7) Sustainability:

Shopping Centre redevelopment is to incorporate sustainability features (e.g., LEED Silver Certification or equivalency, including LEED Storm Water Management Credit, efficient resource use, and incorporate sustainable building materials, ways to better address indoor air quality, noise mitigation and avoid noxious emissions, and consider opportunities for urban agriculture on the site).

(8) Flood Plain Construction Levels

Broadmoor Shopping Centre redevelopment presents an opportunity to meet Richmond's current minimum recommended flood habitable floor elevation standards. The existing average site elevation is approximately 1.1 m geodetic. Redevelopment will provide the following minimum habitable floor elevations:

- for residential uses, the minimum habitable floor elevation level will be 2.9 m (9.5 ft.); and
- for all other uses, the minimum habitable floor elevation of a building will be 0.3 m (1.0 ft.) above the crown of the fronting street.

(9) Financing Infrastructure:

The financing of infrastructure is to be primarily by developers in a variety of ways including Development Cost Charges (DCCs) (for roads, water, sanitary, drainage, parks) and other mechanisms (e.g., service agreements, latecomer charges, phased development agreements).

(10) Financing Community Amenities:

- As noted above, the financing of the Master Plan identified community amenities (e.g., affordable housing, child care, community planning services, community beautification, above and beyond the City's standard servicing agreement requirements) is to be primarily by developers, through density bonusing, phased development agreements and other means.
- Density Bonusing: (additional density above the base 0.5 FAR) may be allowed where developers:
 - meet the Council approved Affordable Housing Strategy requirements, and
 - provide as per the approved Master Plan, a Broadmoor Community Amenity Contribution (e.g., \$2.00 per buildable square foot) which is to be allocated as follows: \$1.00 for child care and \$0.75 for community beautification;
- Phased Development Agreements and other mechanisms (e.g., voluntary contributions) may be used to obtain funds for community planning services (e.g., \$0.25 per buildable sq. ft.);

- Public Art: The provision of public art is encouraged, voluntary and where provided is to be at \$0.60 per buildable square foot;
- (11) Existing Land Use Contract (LUC)
As there is an existing Land Use Contract 022 covering the south portion of the Centre and a residential area to the south, the City will require that, prior to any redevelopment of the Centre, for the Centre portion, the LUC will be need to discharged and replaced with zoning which is more acceptable to the City (e.g., Site Specific Zones).

Proposed OCP Development Permit Guidelines

The intent of the Broadmoor Guidelines is to enhance the design, character and function of the Broadmoor Neighbourhood Service Centre:

- The redevelopment of the Broadmoor Shopping Centre shall meet all applicable existing, general OCP Development Permit Guidelines; and
- In addition, there will be specific Development Permit Guidelines which will also apply to the redevelopment of the Broadmoor Shopping Centre. The specific Guidelines have been referenced in previous sections in this report and are outlined in detail in the Broadmoor Neighbourhood Service Centre Master Plan in Section 11.

Summary of Public Consultation

An extensive public consultation process (open houses, surveys) was undertaken by the proponent during the Broadmoor Shopping Centre Master Plan process:

- The consultant's survey of residents indicates neighbourhood support for the Master Plan;
- The City's 2009 OCP Update survey indicates a high level of City resident support;
- The Centre owners support the Master Plan. City staff requested that the other two owners (i.e., Suncor Energy Inc. [Petro Canada] and Richlea) provide letters of support for the Master Plan.
- On January 21, 2010, Suncor Energy Inc. (Petro Canada) provided a letter stating that that it is "neutral and / or in general support to the Master Plan as long as it does not compromise our long term interests." (**Attachment 12**). Suncor expects to remain in their current format for the foreseeable future.
- On April 7, 2010, Richlea provided a letter stating that it: "___" (**Attachment 13**).
- The Centre owners' letters of support are acceptable as the redevelopment of the Centre will be phased, based on more owner co-operation and more specific proposals, involve additional community input (e.g., public hearings) and be subject to Council approvals.

Consultation with Richmond Schools and School Board

- The Consultant met with the following schools and their comments are reflected in the consultant's survey findings in the Broadmoor Neighbourhood Service Centre Master Plan:
 - Maple Lane Elementary School (presentation)
 - William Bridge Elementary School (presentation)
 - Hugh McRoberts Secondary School
 - Steveston-London Secondary School
- School Board: In mid 2009, City staff generally discussed with School Board staff, the proponent's desire and activities to redevelop the Broadmoor Centre;
- The City Policy No. 5043 regarding OCP Amendment Consultation Referrals requires that OCP amendments are to be referred to the School Board for comment when a proposal has

the potential to generate 50 or more school aged children (e.g., 295 or more multiple family housing units) above what the 1999 OCP allows. The proposed Broadmoor Neighbourhood Service Centre Master Plan proposes approximately 225 residential units. Thus, no formal referral is required. For information purposes, City staff recommend that the OCP amendment and Master Plan be forwarded to the School Board to ensure that they are aware of the planned changes and may comment; and

- On February 18, 2010, City staff again advised School Board staff of the above.

Based on the consultation findings, City staff recommend approval of the proposed OCP amendment and Broadmoor Neighbourhood Service Centre Master Plan, as they will provide survey requested community uses and amenities, and have Centre owners' support. As well, the City's 2009 OCP Survey findings support Centre redevelopment (i.e., 75% of City residents strongly agreed). In addition, the phasing of the Master Plan enables the community and Centre owners to be further consulted and possible changes to be made to the Master Plan if necessary.

Summary of Benefits of the Proposed Broadmoor Master Plan

The Master Plan provides the following benefits:

- For the Community:
 - certainty;
 - addresses community preferences (e.g., improved Centre appearance);
 - more diversity in shops and services;
 - enhanced traffic and TDM practices;
 - more integrated parking and pedestrian routes; and
 - an enhanced mixed community where people can live, work and play.
- For Centre Owners and Developers:
 - certainty;
 - flexibility;
 - economic enhancements;
- For the City:
 - certainty;
 - flexibility;
 - OCP objectives for NCS realized;
 - more provisions for childcare, affordable housing, and public realm beautification; and
 - have primarily developer financed improvements.

Financial Impact

Developers will contribute to DCCs and community amenities through a variety of means including density bonusing, phased development agreements and voluntary contributions.


Conclusion

A developer wishes to redevelop the first phase of the Broadmoor Shopping Centre. After community consultation and consultant studies, an acceptable Master Plan is proposed which has community and Centre owner support. An OCP amendment is recommended to implement the Master Plan. The Plan provides the City with a Centre specific, sustainable, tailored and phased

community-based framework to guide and review future redevelopment applications for the Broadmoor Shopping Centre. The proposed Master Plan is consistent with the existing OCP policies. Staff recommend approval.



Terry Crowe
Manager, Policy Planning



June Christy
Senior Planner

JC:cas

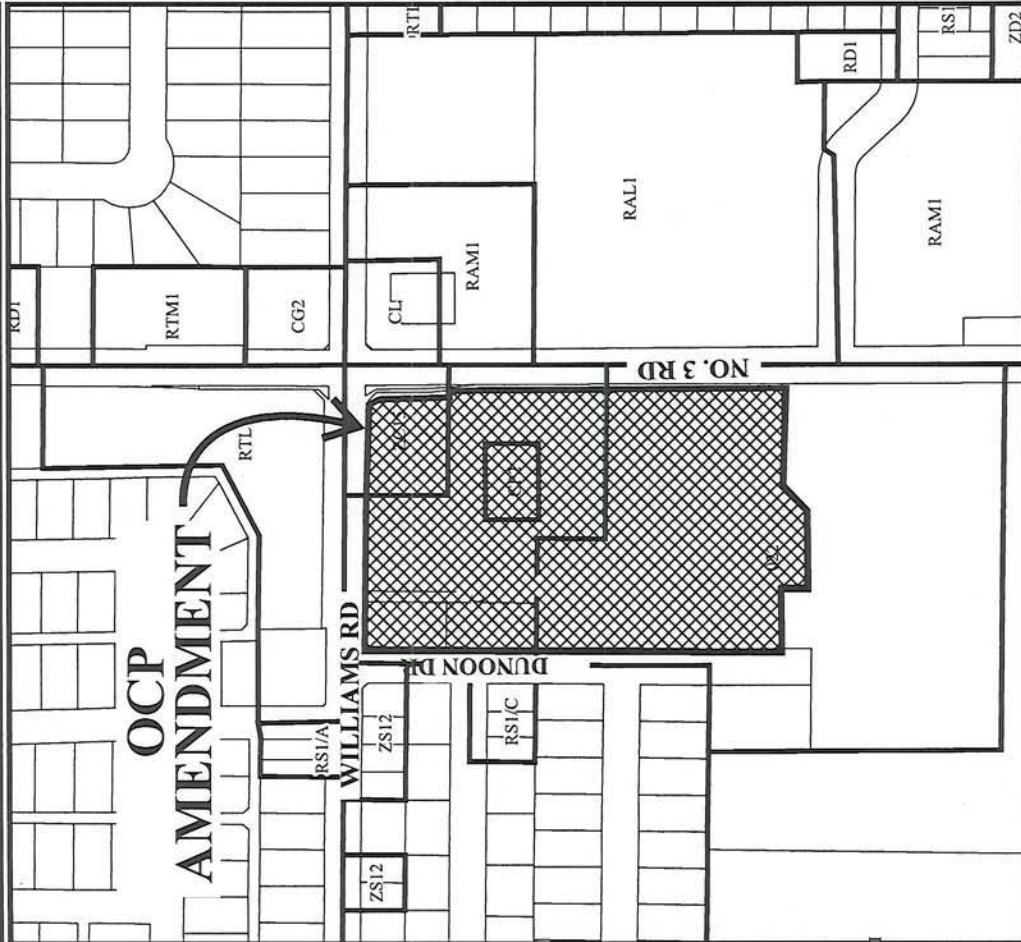
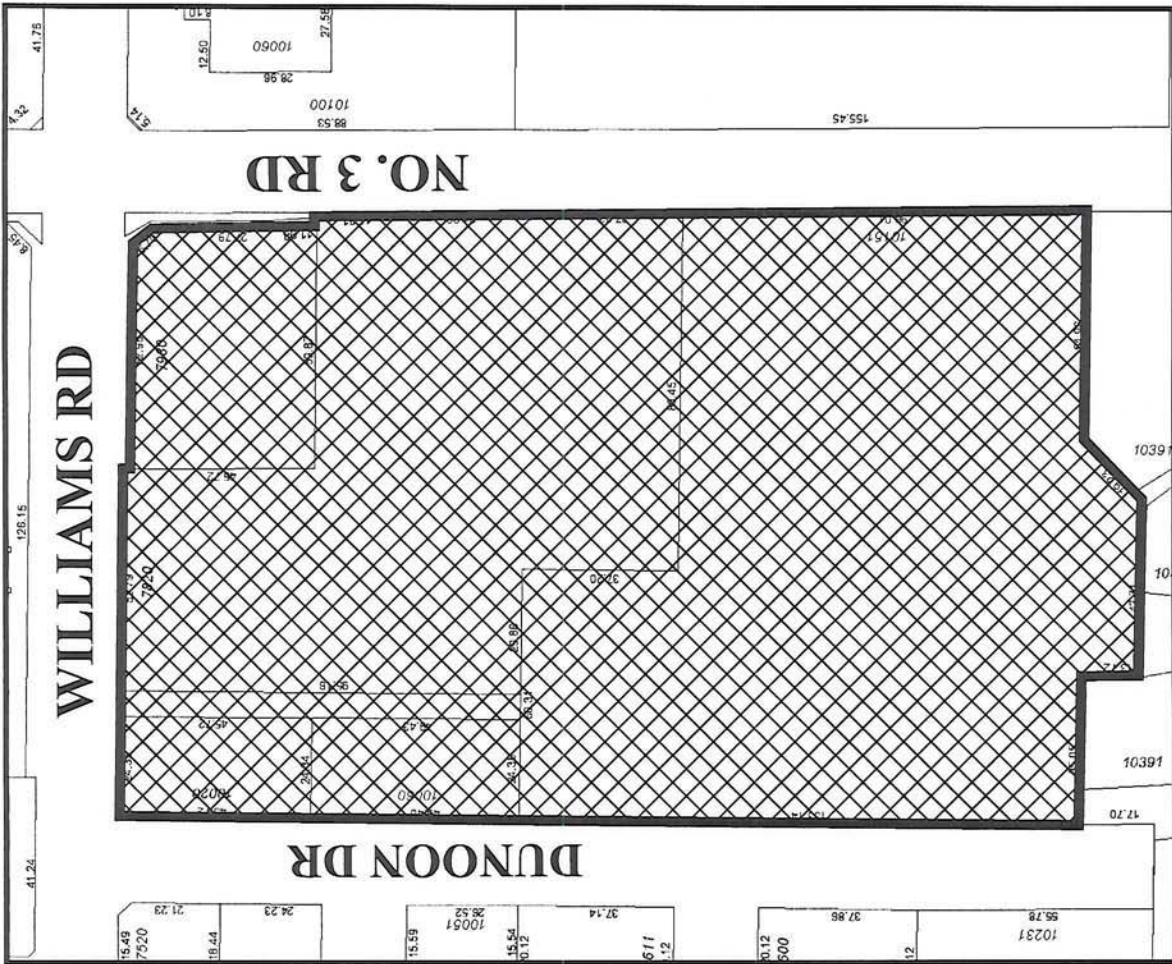
Attachments

Attachment 1 – City Staff Memo to Council re the status & need for a Master Plan
Attachment 2 - Broadmoor Shopping Centre Site Data Sheet
Attachment 3 - Broadmoor Shopping Area Site Owners and Properties Map
Attachment 4 - Broadmoor Shopping Centre Master Plan Terms of Reference
Attachment 5 - Broadmoor Land Use Concept 1
Attachment 6 - Broadmoor Land Use Concept 2
Attachment 7 - Broadmoor Master Plan Property Owner Participation (e-mail)
Attachment 8 - Broadmoor Neighbourhood Service Centre Preferred Land Use Concept
Attachment 9 - Broadmoor Neighbourhood Service Centre Master Plan
Attachment 10 - Broadmoor Neighbourhood Service Centre Phasing Diagrams
Attachment 11 - Broadmoor Shopping Centre Master Plan Transportation Study
Attachment 12 – Suncor Letter January 21, 2010
Attachment 13 – Richlea Letter April 7, 2010



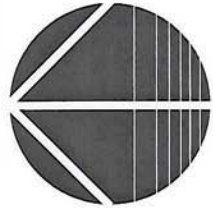
City of Richmond

OCP AMENDMENT



Original Date: 03/05/08
 Revision Date: 04/14/10
 Note: Dimensions are in METRES

OCP Amendment Bylaw No. 8579





City of Richmond
 Planning and Development Department

Memorandum

To: Mayor and Councillors
From: Brian J. Jackson, MCIP
 Director of Development
Date: February 19, 2009
File: RZ 08-410730

**Re: Broadmoor Shopping Centre Development Applications
 and Public Consultation Report Binder**

The purpose of this memo is provide some background information to consider while reviewing the Public Consultation Report binders that Brook + Associates Inc. has delivered to each of you.

The City is reviewing Rezoning and Development Permit applications for the site, as described below. Although staff advised the applicant that holding a public meeting was premature and asked the developer to wait until a mutually acceptable redevelopment proposal had been agreed upon, the owner decided to proceed anyway.

Location

Broadmoor Shopping Centre is located at the corner of No. 3 Road and Williams Road, behind the corner gas station. The Centre is one of three commercial properties that together are designated as a Neighbourhood Service Centre in the OCP. It includes 7820 Williams, 10020 Dunoon Drive and 10060 Dunoon Drive, which are zoned Community Commercial District (C3) and Neighbourhood Pub District (NHP) limited to the location of the Pioneer's Pub.

It is an older commercial development with a long history and more than a few expansions and changes over it's long history. It includes commercial units setback from No. 3 Road in 2 wings, store fronts facing the neighbouring Richlea Shopping Centre and surface parking areas wrapping around the corner gas station. The Centre backs onto a City lane and includes two Dunoon Drive properties across the lane, which are required to be used for parking.

Development Applications

Rezoning application RZ 06-340370 was received on June 20, 2006 & has been withdrawn. The application was to remove the NHP zoning district and the associated Pioneer's Pub to make room for a new retail anchor tenant. The application was withdrawn and a new lease secured to accommodate the Pub.

Development Permit application DP 07-378677 was received on June 21, 2007 in association with the previous Rezoning application. The application was revised and is currently under review in association with the new Rezoning application.

Rezoning application RZ 08-410730 was received on February 20, 2008 for a new CD zone to allow for the insertion of a new mixed-use building with a residential component onto the site. The new building would replace the older wing that backs onto the lane and involves city lane closure and sale. The OCP allows for residential land use in the Neighbourhood Service Centre land use map designation.

Development Challenges

Transportation, specifically access to the Safeway loading bay, was identified early on as a key issue that must be overcome. The applicant is proposing to close the City lane, which Safeway trucks currently use to access the loading bay. Their site plan proposal accommodates departing Safeway trucks through their site to Williams Road, but approaching Safeway trucks would turn off Williams Road onto Dunoon Drive and left into the site. Staff have expressed concern about the re-routing of the large delivery trucks onto the residential street, although Dunoon Drive is currently used by trucks accessing the service and loading area of the neighbouring Richlea Shopping Centre. We are waiting for the applicant's engineering consultant to provide a functional analysis of truck turning movements from Williams Road, through Dunoon Drive and into the site.

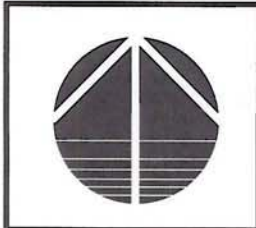
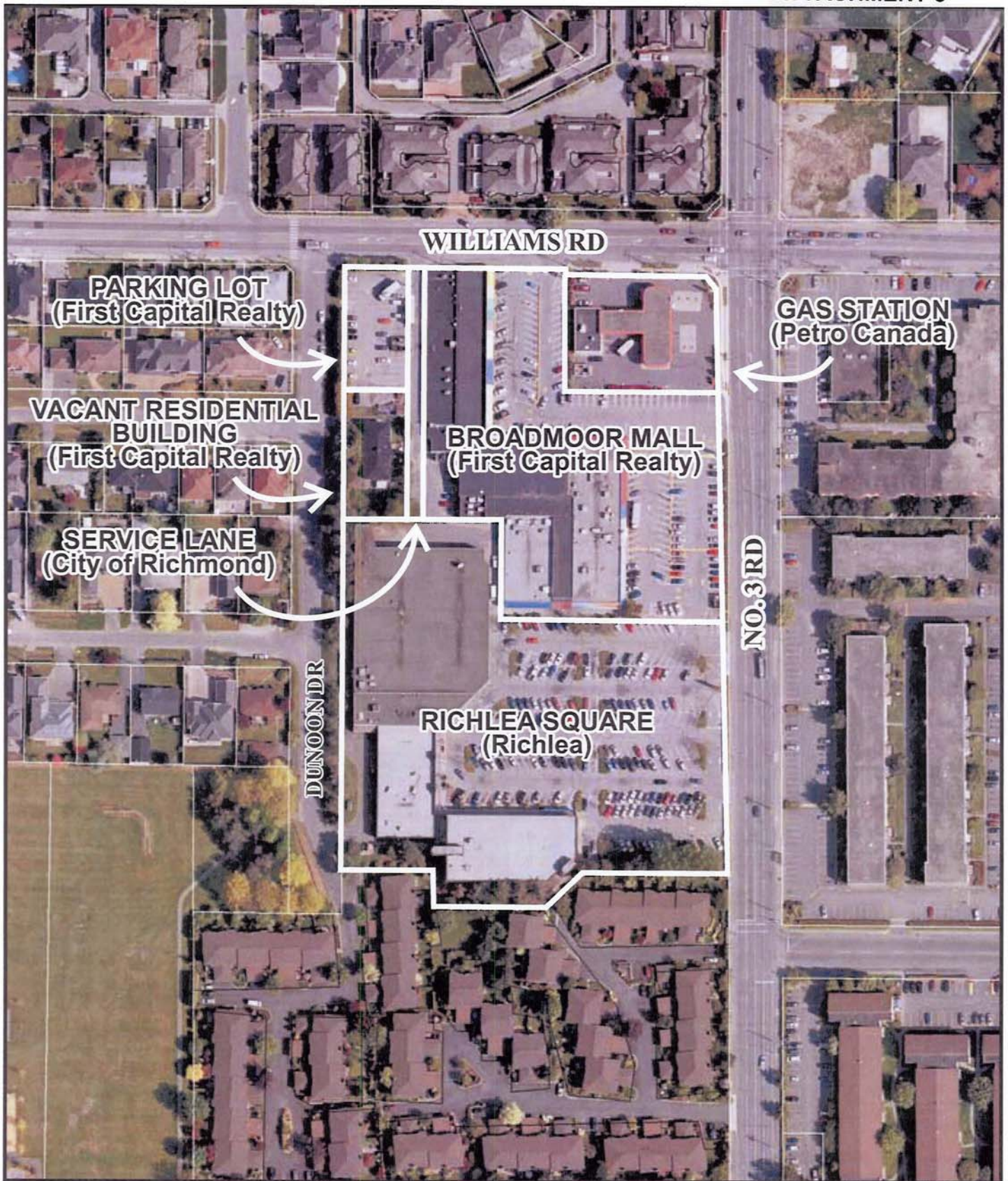
There are significant issues that the applicant must address before the application comes forward, including transportation as noted above, but also, how the entire Neighbourhood Service Centre area (Richlea, Broadmoor & Petrocan) might get redeveloped. This application is only for a portion of the existing Broadmoor Shopping Centre and until we understand how the entire centre could get redeveloped, we cannot support the application.

Staff will be going back to the applicant to require a Master Plan for how the redevelopment of the entire Neighbourhood Service Centre could be done AND ask for all the landowners to agree on such a redevelopment plan. This will be difficult because the landowners have generally not cooperated between themselves.

Brian J. Jackson, MCIP
Director of Development

BJ:sb

Broadmoor Shopping Centre Data Sheet			
Parcel	Property Owner	Site Area (m2)	Zoning and Existing Uses
Broadmoor Mall	First Capital Realty	11,269	Community Commercial (CC) Pub and Sales (CP2) - 2 banks - Pub and Liquor Retail - 4 restaurants/Fast Food - Dry Cleaner - Tailor - Barber - Grocery - Pet Retail - Mobility Retailer
Richlea Square	Richlea	16,929	LUC 022 - Safeway - 4 restaurants/cafes - Bank - Insurance Broker - 3 Dental Clinics - 2 Medical Clinics - Pharmacy - Dry Cleaner - 2 Aestheticians - Travel Agent - Animal Clinic - Other retail (House of Cards, Blockbuster)
Petro Canada	Petro Canada	2,490	Gas Station Commercial (ZC) - Gas Station - Convenience Store
Residential Lot	First Capital Realty	1,202	Community Commercial (CC) Vacant Residential Building
Parking Lot	First Capital Realty	1,113	Community Commercial (CC) Parking Lot
Lane	City of Richmond	541.5	Service Lane



Broadmoor Shopping Area Site & Owners

Original Date: 01/13/10

Amended Date:

Note: Dimensions are in METRES

March 20, 2009

**Terms of Reference
Broadmoor Shopping Centre Master Plan**

1. Purpose

The purpose of the Terms of Reference (TOR) for the Broadmoor Shopping Centre (BC) Master Plan is to provide the City and developers with a planning framework by which:

- Developers:
 - can voluntarily prepare a Master Plan for Broadmoor Shopping Centre (see table below), and
 - based on the Master Plan, may prepare specific proposals to redevelop the Shopping Centre in phases,
- The City can have an appropriate planning framework which reflects community preferences and can be used to assess the appropriateness of specific Shopping Centre redevelopment proposals. (Note: This framework may be later modified by the City when updating the OCP).

2. Synopsis:

In this report, the following terms have the following meanings and management approaches:

Area (see Map 1)	Location	Management Approach
Larger Area: The Broadmoor Neighbourhood Centre	Means the four quarter sections centred on the intersection at No. 3 Road and Williams Road.	<p><u>The Consultation Area</u></p> <ul style="list-style-type: none"> - Developers who wish to prepare a Master Plan for the smaller Broadmoor Shopping Centre area are to consult with: <ul style="list-style-type: none"> - City residents, and in particular, - the residents, businesses and property owners in the Broadmoor Neighbourhood Centre area, to determine their interests and preferences which are to be incorporated into the Shopping Centre Master Plan. - The Master Plan is not to be prepared for the larger Neighbourhood Centre area, but only for the smaller Shopping Centre area.
Smaller Area: The Broadmoor Shopping Centre	Means Shopping Centre, on the south west corner at the intersection of No. 3 Road and Williams Road.	<p><u>The Master Plan Area</u></p> <ul style="list-style-type: none"> - Using the terms of reference and consultation findings from residents in the City and larger Neighbourhood Centre area, developers may prepare a Master Plan for the smaller Broadmoor Shopping Centre. - Council's approval of the Master Plan is required. - Using the approved Shopping Centre Master Plan: <ul style="list-style-type: none"> - Developers may then prepare specific redevelopment proposals for the Shopping Centre area, and - The City will use the Master Plan to evaluate them.

3. The Broadmoor Shopping Centre Master Plan Area

To reiterate, the Master Plan area is only the smaller Broadmoor Shopping Centre and not the larger Broadmoor Neighbourhood Centre area.

4. Rationale

To redevelop the Broadmoor Shopping Centre, an OCP Neighbourhood Centre vision, planning principles and policies need to be established. This has not been done, as City staff are undertaking other Council priorities. A developer has indicated that they wish to re-develop a portion of the Broadmoor Shopping Centre now. In order for this to occur, the City requires that they first undertake a planning program to prepare a Master Plan for the Broadmoor Shopping Centre).

These terms of reference are prepared to enable developers to prepare such a Master Plan and the City to have a basis upon which to decide if and how redevelopment proposals may proceed.

If the developer does not wish to prepare the Broadmoor Shopping Centre Master Plan, their proposed redevelopment will not proceed.

5. Existing Official Community Plan Policies For All Neighbourhood Centres

An objective of the OCP is to maintain a hierarchy of retail and personal service locations in the City (e.g., City Centre, neighbourhood centres, local commercial centres). The neighbourhood centres and local commercial centres are outside the City Centre and are intended to meet community-wide and neighbourhood needs. The OCP identifies seven "Neighbourhood Centre" locations one of which is the Broadmoor Neighbourhood Centre (Map 1).

The existing broad OCP Neighbourhood Centre redevelopment policies emphasize:

- Fostering a "village" character for neighbourhood retail districts outside the City Centre.
- Enhancing neighbourhood shopping centres by:
 - Supporting their enhancement and encouraging services and amenities to cluster in their vicinity,
 - Improving the pedestrian, bike, wheelchair and scooter-friendliness of these centers, to achieve a "main street" gathering place for the surrounding neighbourhood,
 - Improving the urban design of the Neighbourhood Centres,
- Encouraging the development of small, pedestrian-friendly, street front convenience and personal service facilities on major roads to complement neighbourhood service centres and meet the needs of surrounding residents.
- Discouraging strip malls & big box retail uses.

The relevant OCP policies for the Broadmoor Neighbourhood Centre are:

- Achieving Low Density Residential Development - along Williams Road (between Gilbert and No. 3 Road) and along No. 3 Road south of Francis to Williams,
- Improving The Community's Identity – by establish a stronger community identity through:
 - A more co-ordinated pedestrian-scale,
 - Improved transit service (e.g., to connect the shopping centre and the south Arm community Centre).

6. The Role, Importance Of Neighbourhood Centres

- Neighbourhood Centres are specific places that:
 - Strengthen The Heart Of The Community: - where residents can find a wide variety of stores, services, commercial uses, jobs, housing, amenities and public places to meet with neighbours and join in community life.
 - Enhance The Quality Of Life - With a wider range of uses and amenities,
 - Improve Pedestrian and Transit Oriented Uses:
 - Reduce the dependency on the car (e.g., improve transit; bus, bicycling, walking),
 - Improve vehicular access,
 - Provide New Community Benefits:
 - Promote sustainability (e.g., reduce storm water runoff & energy consumption, provide green roofs and walls, urban agriculture opportunities),
 - Improve a greater variety of housing forms and choices
 - Other, TBD,
 - Provide Community Amenities
 - Increase built amenities (e.g., more affordable housing, child care, community meeting rooms),
 - Improve parks and trails: City parks staff advise that future development is to provide an opportunity to better connect proposed development with Maple Lane Park and open up the park more to the residents in the area.
 - Other, TBD.
 - Allow Greater Densities: than the surrounding single family areas, in order to create more vibrant communities, accommodate limited growth and provide more amenities at no cost to the City.
- There is no one model to achieve this.

7. The Build Out Time

The build out of the Broadmoor Shopping Centre Master Plan will be market driven and is estimated to occur over the longer term (e.g., 2041).

8. Characteristics of Broadmoor Shopping Centre

The Broadmoor Shopping Centre consists of five properties with the following existing uses:

- a gas station,
- two existing shopping areas,
- a neighbourhood pub,
- private liquor store,
- surface parking lots,
- an existing nonconforming duplex,
- an existing City lane that services the loading bay for the anchor large format grocery store (Safeway),
- older commercial developments with a long history and several previous expansions.

9. Characteristics of The Area Surrounding Broadmoor Shopping Centre

- Immediately around the Shopping Centre
 - To the north is:
 - Williams Road, a minor arterial with some transit service (Williams Road has been identified as needing more transit service),
 - Across Williams Road, are a two-storey townhouse development (29-unit and 6-unit) fronting onto Greenlees Road, Williams Road and No. 3 Road, zoned "Townhouse District (R2),
 - To the east is:
 - No. 3 Road, a major arterial and transit route,
 - Across No. 3 Road, is an existing 3-unit commercial property and a 100 unit three-storey apartment building fronting onto both Williams Road and No. 3 Road, zoned "Local Commercial District (C1)" and "Townhouse & Apartment District (R3)" respectively. There is also an existing 308-unit three-storey apartment complex fronting onto both No. 3 Road and Ryan Road, zoned "Medium-Density Residential District (R7)",
 - To the south is:
 - an 87-unit strata-titled townhouse development, under "Land Use Contract 022",
 - To the west is:
 - Maple Lane Elementary School park and single-family homes. The park is located east of the school, fronting onto Dunoon Drive and No. 3 Road and is zoned "Land Use Contract 022" and "School and Public Use District (SPU)". The single-family homes front onto Williams Road, Dunoon Drive, Nevis Drive, and Petts Road, zoned "Single-Family Housing District," subdivision areas C (R1/C) and E (R1/E), and "Comprehensive Development District (CD/124)".
- Within an 800 m walking radius is:
 - a few small commercial and medical properties,
 - a secondary school (McRoberts),
 - 3 elementary schools (Maple Lane, Errington & Bridge),
 - single-family housing on larger lots (predominantly R1/E),
 - a few duplexes (R5),
 - large rental apartment building properties,
 - strata-titled townhouse developments,
 - two churches, a synagogue development property, and
 - one of Richmond's major parks (South Arm) with a number of playing fields & courts, walking trails, community centre & outdoor swimming pool.

10. The Broadmoor Neighbourhood Shopping Centre Planning Principles

The following Principles are to be addressed in the Master Plan for the Shopping Centre:

- Sustainability: (e.g., social, economic and environmental; the City's Green Building policies, infrastructure),
- Achieve A Compact Community:
 - Better integrate development with the surrounding urban fabric,
 - Allow mixed-uses (e.g., residential, office, commercial) neighbourhood,
 - Allow new uses including interior and exterior oriented retail uses,
 - Encourage street oriented retail (along Williams and No. 3 Road),
 - Other TBD,
- Improve Connectivity and Transit To and From the Shopping Centre:
 - Encourage a more integrated access network of streets, and bicycle and pedestrian paths to enhance non car uses:
 - Improve linkages to the surrounding neighbourhood (including improved pedestrian crossing across No. 3 Road and Williams at relevant locations),

- Improve transportation circulation, parking and loading areas, and pedestrian and cycling connections,
- Encourage alternatives to the car (e.g., bus passes, co-op cars, bicycle facilities, and walking), within a 5 to 10 minute walking distance (400 to 800 metres; 1,300 to 2,500) feet,
- Improve pedestrian and traffic safety,
- Economic Viability:
 - Seek economically viable uses,
 - Have developers provide community amenities, at their cost.

11. Shopping Centre Master Plan Considerations

The following factors are to be considered when preparing the Master Plan and incorporated into it as necessary:

- A Community Vision:
 - An overall Shopping Centre vision and character statement (e.g. retail and residential streetscapes, Williams and No. 3 Road streetscape),
- Principles: see above,
- Mixed Use:
 - Ensure that the existing mix of uses is expanded not reduced.
- Land Use Types and Quantities:
 - The estimated land use types and amounts that are needed and likely to be achieved in this location,
- Building Form:
 - For all uses, a variety of building forms,
 - For residential uses, 3 storey townhouses and mid-rise buildings,
- Density:
 - All uses: - the maximum density is to be 1.5 FAR maximum,
 - For buildings with affordable housing or institutional uses, additional density of up to 0.5 FAR, for a total of 2.0 FAR may be allowed.
- Buildings Heights:
 - Are to be varied,
 - All Buildings: the maximum building height is to be 9 m (62 ft.) or 6 storeys
 - Buildings with affordable housing or institutional uses may be higher than 6 stories.
- Urban Design:
 - Public safety must be incorporated into building and landscaping designs,
 - Provide community focal points and elements to give a sense of place,
 - Improve streetscape and the public realm (e.g., medians, boulevards, street furniture),
- Amenities:
 - Identify gaps in community amenities (e.g., childcare, parks) and the anticipated need for them,
 - Provide more built affordable housing and child care facilities,
 - Enhance parks, trails, community facilities and public plazas,
 - Public art is encouraged,
- Flood Protection
 - The City will advise of required flood construction levels.
- Infrastructure Upgrades (water, sanitary sewer, storm drainage),
 - The existing water, sanitary sewer, storm drainage capacities are to be identified
 - The proposed improvements to accommodate new development are to be identified.

12. A Shopping Centre Master Plan Implementation Program

- Developers are required to prepare a Shopping Centre Master Plan Implementation Program which includes:
 - An OCP vision, policies and design guidelines,
 - Zoning and building requirements
 - A Financing Program which shows:
 - How much each Master Plan element (e.g., infrastructure, amenities, public realm improvements, streetscape upgrades) will cost, on site and off site,
 - Who will pay for them,
 - How they will be paid, (e.g., directly by developers, by DCCs, density bonusing) and
 - When they will be paid.
- A phasing plan is required.
- City costs are to be zero or minimal.

13. Process and Schedule

- City Staff Team and Role
A City Broadmoor Neighbourhood Centre City staff team will be responsible for the overall management of the process and ensuring that the Terms of Reference are addressed. The City Staff Team membership will include staff from Planning, Development, Transportation, Engineering, Parks, and Real Estate.
- Proponent Role
 - Proponents will be responsible for doing all the work at their expense.
 - The proponent will undertake necessary studies including:
 - Public consultation,
 - Demographics,
 - Land use (residential, commercial, office),
 - Economic: the potential market for proposed developments and their financial feasibility (e.g., opportunities and constraints to new development, including residential and retail/service uses),
 - Urban design: (e.g., neighbourhood character, streetscape),
 - Engineering,
 - Flood Protection,
 - Traffic and transportation,
 - Financing,
 - Proposed City and private land ownership,
 - Other.
- Public Involvement
 - The developer will consult with residents, property owners, tenants, businesses, community groups and stakeholders in Neighbourhood Centre and Shopping Centre areas by using a variety of City approved methods (e.g., open houses, mail in surveys, random telephone surveys),
 - All city residents are to be invited to provide comments,
 - An initial open house and survey is required to provide an opportunity to identify issues and opportunities, and solutions,
 - The proponent will ensure that:
 - Community needs are incorporated into the Shopping Centre Master Plan,
 - New development provides improved community amenities,

14. Shopping Centre Owner Consensus

The proponent is to ensure that all Shopping Centre property owners and tenants are consulted, and the property owners of the five Shopping Centre properties agree in writing to the Shopping Centre Master Plan.

15. The Products

The study results include:

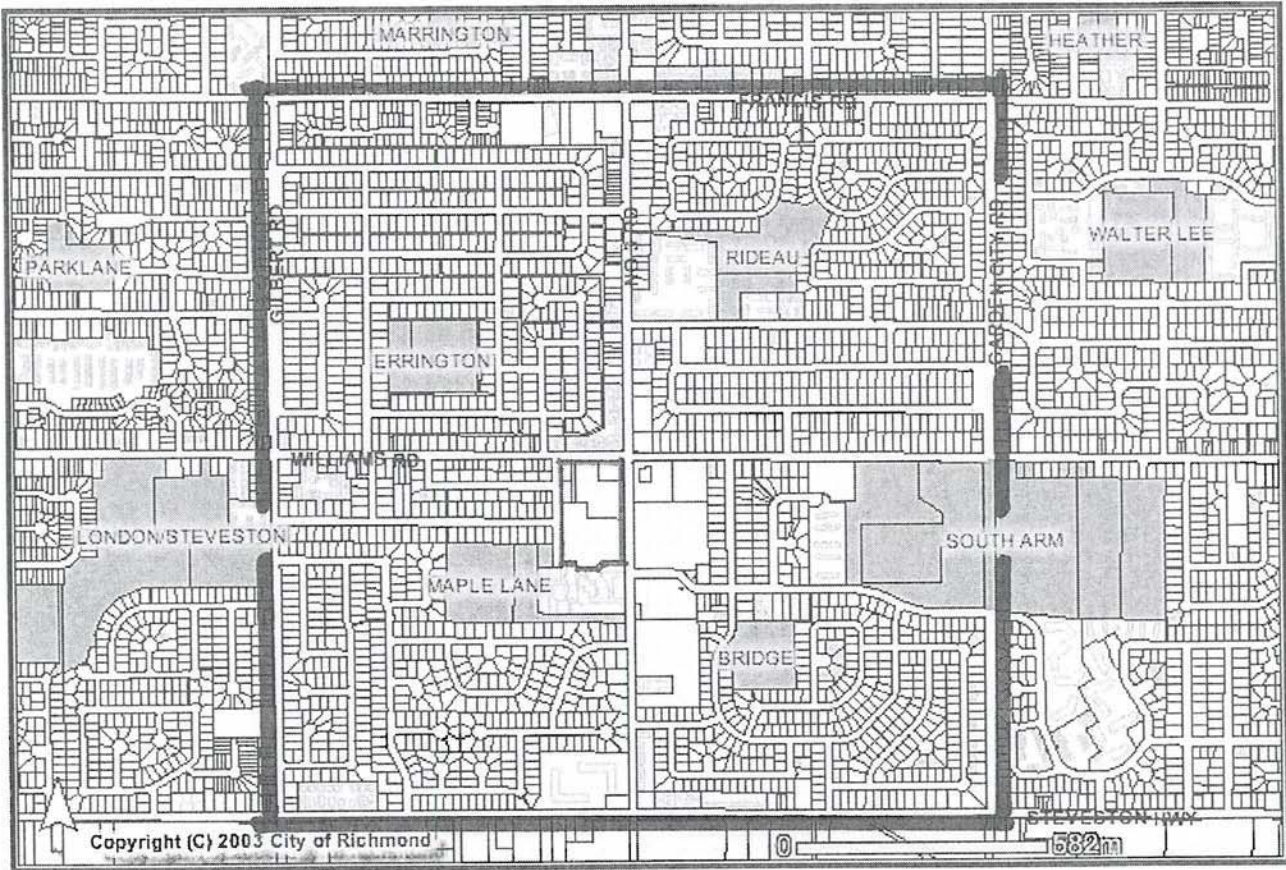
- A Work Program showing how all work will be completed,
- Survey results (e.g., community priorities),
- Background studies,
- Shopping Centre Master Plan options,
- Drafts and a final Shopping Centre Master Plan,
- Drafts and a final Implementation Program including:
 - OCP amendments including policies, design guidelines
 - Zoning regulations
 - Phasing schemes,
 - Financing schemes,
 - Other, as required.

16. Possible Alteration Of the Terms Of Reference and Possible Termination Of The Process

City staff and Council will monitor the process and based on community feedback may alter the Terms of Reference, including terminating the process without compensation.

Contact
TERRY CROWE, Manager
Policy Planning Division, City Of Richmond
Tel: 1-[604]-276-4139

Broadmoor Neighbourhood Centre



Broadmoor Neighbourhood Centre	
Broadmoor Shopping Centre	

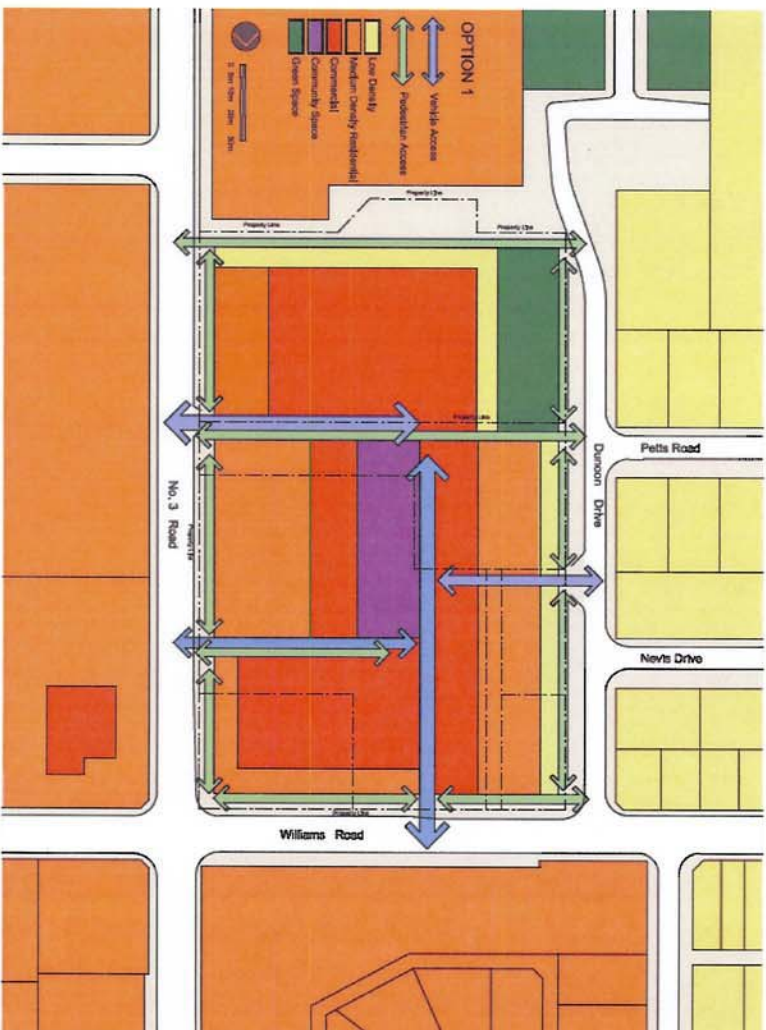
Land Use Concept 1

People will be able to live, work and meet their daily needs without having to use a car to do so. Public spaces will encourage gathering and accessibility for all people.

Key Elements

Key elements of the plan are designed to:

- Revitalize the existing shopping area and provide additional shopping options
- Pedestrian improvements to the streetscape both internally and to the surrounding site and numerous green connections through the site.
- Enhance the economic viability of the mall and individual tenants
- Provide additional housing options in the Broadmoor community
- Residential interface integrates with adjacent Durnoon and Maple Village residential areas.
- Residential densities increase as approach No. 3 Road and Williams
- Most commercial uses oriented internal to the Centre to create an intimate shopping experience.
- Centralized larger community space to meet additional residential need with adjacent pocket park and green connections.
- Direct linkage with Maple Lane neighbourhood park
- Primary access to the site off Williams and No. 3 Road - secondary accesses for service and residential uses.



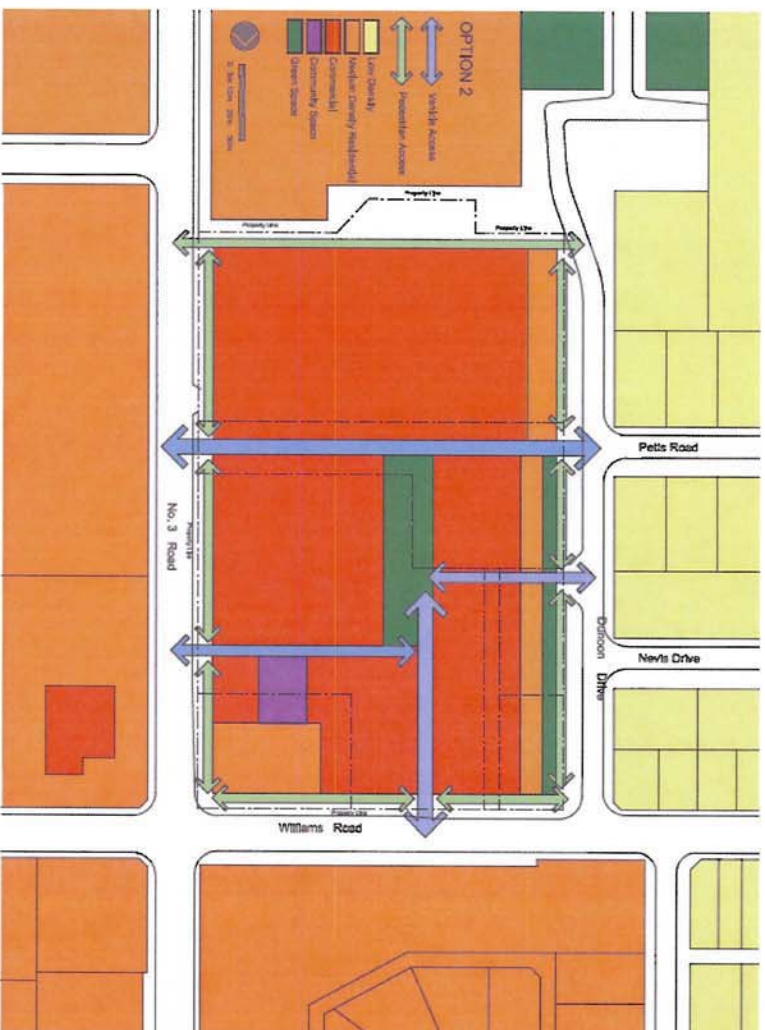
Land Use Concept 2

People will be able to live, work and meet their daily needs without having to use a car to do so. Public spaces will encourage gathering and accessibility for all people.

Key Elements

Key elements of the plan are designed to:

- Revitalize the existing shopping area and provide additional shopping options.
- Enhance the economic viability of the mall and individual tenants
- Highest residential uses located at corner of No 3 Road and Williams.
- Lower residential density integrates with adjacent Dunoon residential.
- Majority of land remains commercial.
- Green pocket park centralized.
- Less community space as in less demand with lower residential densities.
- Community space is located close to residential uses.
- Green connections surround the Centre whereas vehicle access is internalized.



Christy, June

From: Blaire Chisholm [BChisholm@brookdev.com]
Sent: January 18, 2010 5:25 PM
To: Christy, June
Subject: Broadmoor Master Plan Property Owner Participation

Hi June,

For your information, the following provides a brief outline of the key dates and happenings in our discussions with the Master Plan property owners.

First Capital Realty initiated an early and ongoing dialogue with the two adjacent private property owners who form part of the Master Plan area. Owner representatives were identified at the end of March 2009 and a meeting was organized May 4 with the following objectives:

- to review the Terms of Reference for the Master Plan,
- review preliminary concept diagrams and solicit feedback, and
- to discuss an agreement in principle between the landowners.

At the conclusion of the meeting, the owner representatives agreed to work with each other to best of their ability without compromising their long term and unique development interests. Over the course of the next eight months, e-mail has been the predominant form of communication, as owners preferred to communicate in this manner, and were not available or declined to meet. Materials sent to the owners included various drawing iterations of the Master Plan concepts, the newsletter with the neighbourhood survey, a reminder invite to the September Open House, copies of the Open House information panels and Public Consultation Summary Report and finally the Master Plan document. Detailed feedback has been limited, but both owners have re-iterated that they are willing to cooperate in this process, as long as their long term development interests are not compromised. Petro Canada has noted that they expect to remain in their current format for the foreseeable future and have no issue with the Master Plan and Richlea representatives re-iterate that they expect the Master Plan to not compromise their long term development interests.

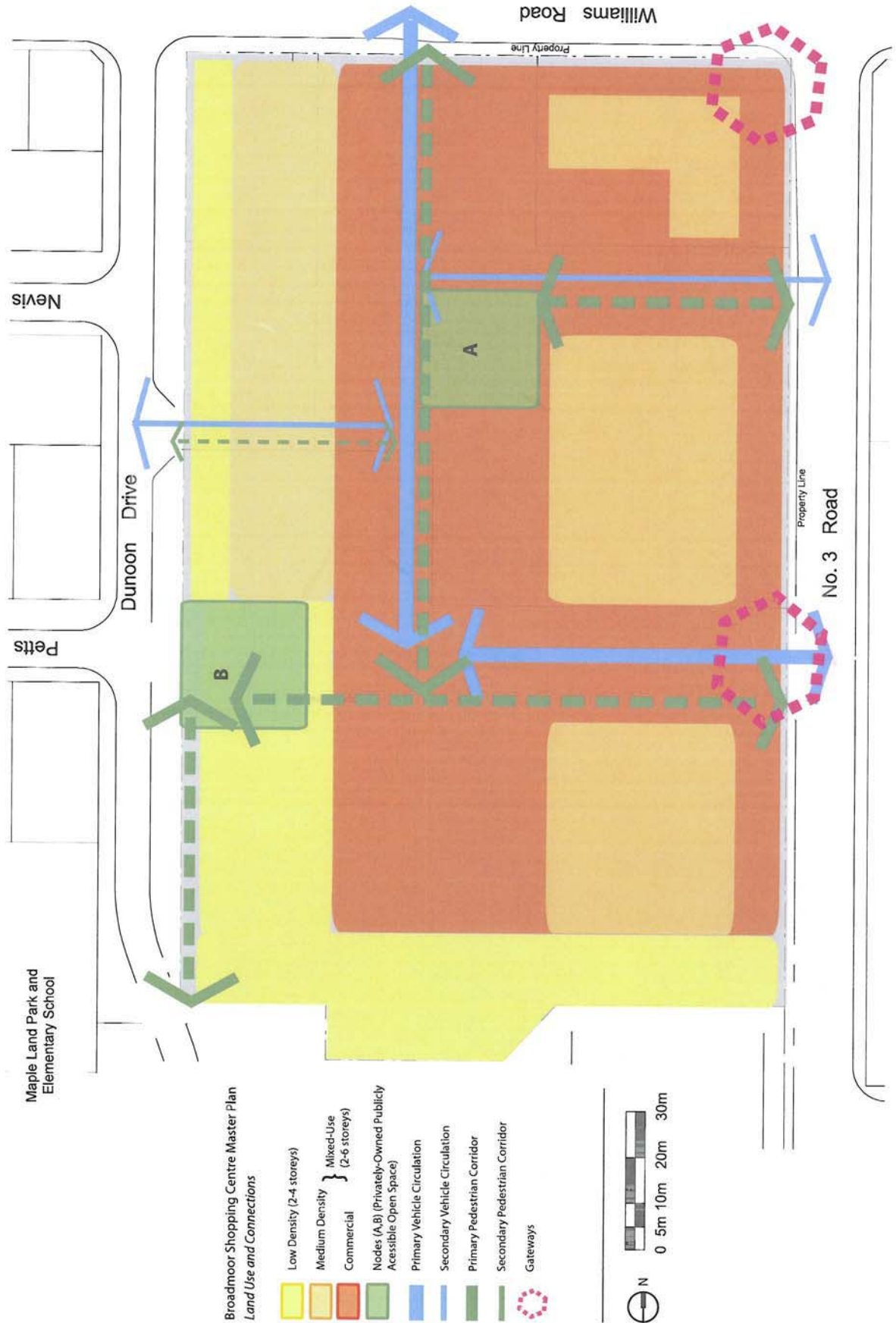
Meeting Dates:

March 31, 2009 - Representative of property owners identified for meeting.
May 4, 2009 - Start up meeting ' Master Plan Terms of Reference' with Richlea and Petro representatives
June 3 - E-mail sent to Richlea and Petro with notes of May meeting and a request for a second meeting - both representatives decline to meet
August 18 -E-mail sent to Richlea with request to meet to discuss access/easements - Richlea representative requested that communication be sent via e-mail and no meeting
September - Notification circulated in newspaper and newsletter mail-out for Open House
September 28 - Reminder e-mail about Open House and request for feedback
October 28 - Results from Open House sent to both landowners with request for feedback via e-mail
November 9 - Follow up with Richlea representative - who notes will cooperate with FCR as long as their interests are not compromised.
December 2 - Response from Petro with new contact provided. E-mail correspondence saying no issue with Master Plan.
December 18 - Request to meet to discuss Master Plan
January 18, 2010 - Master Plan document sent to Richlea and Petro Canada.

Blaire Chisholm, BSc (Env), MUP
Associate
T (604) 731-9053 ext.104

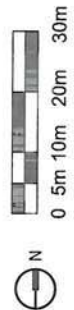
01/25/2010

Broadmoor Neighbourhood Service Centre Land Use Concept



Broadmoor Shopping Centre Master Plan
Land Use and Connections

- Low Density (2-4 storeys)
- Medium Density } Mixed-Use (2-6 storeys)
- Commercial
- Nodes (A,B) (Privately-Owned Publicly Accessible Open Space)
- Primary Vehicle Circulation
- Secondary Vehicle Circulation
- Primary Pedestrian Corridor
- Secondary Pedestrian Corridor
- Gateways



Broadmoor Neighbourhood Service Centre Master Plan



Possible view looking southeast at Dunoon Drive from Williams



Possible view looking southwest from Williams and No. 3 Road

Prepared for the City of Richmond by Brook + Associates Inc., April 7, 2010

- A greater proportion of residents own (80%) their dwelling than rent (20%) and this proportion is also greater than that typically found in Richmond (approximately 75:25). Rents and housing prices are also nominally higher on average when compared to Richmond.

4. Land Use Context & Adjacencies

The Broadmoor community is comprised of a secondary school, 4 elementary schools, smaller commercial spaces, places of worship, South Arm (a major City park with community facilities), in addition to the variety of low to medium density residential developments noted above.

An important consideration in preparing the Master Plan was to ensure that the Neighbourhood Centre integrates well with the site's neighbouring land uses and built form. As noted earlier, the Broadmoor Shopping Center Master Plan area is located at the intersection of Williams and Number 3 Road. To the north and across Williams Road there is a townhouse development, single family residences to the west along Dunoon Drive, and the Maple Village townhouse development is located directly to the south. No. 3 Road has a mixed-use character near Williams, with commercial services and low-rise apartment buildings. The following figure provides a visual depiction of the land use context around the Broadmoor Service Centre.

The following table provides an overview of the existing OCP designations of the Master Plan area and existing policies that apply to the Neighbourhood Service Centre, and provides the zoning context for lands immediately adjacent to the Centre.

Broadmoor Neighbourhood Service Centre		
OCP	<p>The OCP designates the Broadmoor Neighbourhood Service Centre as Neighbourhood Service Commercial (NSC).</p> <p><u>In 2.4 Commercial on page 2-16, Schedule 1:</u></p> <p>Enhance neighbourhood shopping centres by:</p> <ul style="list-style-type: none"> • supporting their development and use as neighbourhood service centres by encouraging neighbourhood service centres and amenities to cluster in their vicinity; • improving the pedestrian, bike, wheelchair and scoot-friendliness of these centres, to achieve a “main street” gathering place for the surrounding neighbourhood; <p>Encourage the development of small, pedestrian-friendly, street front convenience and personal service facilities on major roads to complement neighbourhood service centres and meet the needs of surrounding residents.</p> <p><u>In 3.1 Neighbourhood and Sense of Community, on page 3-4:</u></p> <p>Encourage local transit service to connect to the local gathering places, for example, along Williams Road to the South Arm Community Centre and Broadmoor Neighbourhood Service Centre.</p> <p>Establish strong community identity through co-ordinated pedestrian-scale development at the intersection of No. 3 Road and Williams and northward along No. 3 Road would help to provide a “heart” for Broadmoor.</p> <p><u>In 4.1 Road Network, on page 4-3:</u></p> <p>Provide distinctive design features in the road network to complement neighbourhood character and to emphasize landmark locations. (Identifies Williams and No. 3 Road as a “Priority Area” and “Neighbourhood Service Centre” where distinctive road design and pedestrian improvements will complement neighbourhood character).</p>	
Direction	Adjacent to the Broadmoor Neighbourhood Service Centre	
	Existing OCP	Zoning Bylaw
NORTH	<ul style="list-style-type: none"> • Williams Road, a minor arterial with some transit service. Designated as a transit corridor and on-road bike route in the OCP. • Across Williams Road - low-medium density residential designated as multiple family residential. 	<ul style="list-style-type: none"> • Low Density Townhouses (RTL1) - a 6-unit townhome development that fronts onto Greenlees Road, and - 29-unit townhome development at the intersection of No. 3 Rd and Williams.
EAST	<ul style="list-style-type: none"> • No. 3 Road, a major arterial, transit route, and designated as a transit corridor in the OCP. • Designated predominantly as multiple family residential with a small pocket of commercial. 	<ul style="list-style-type: none"> • Local Commercial District (CL) and Medium Density Low Rise Apartments (RAM-1): - an existing 3-unit commercial property and a 100 unit three-storey apartment building fronting onto both Williams Road and No. 3 Road, respectively. • Low Density Low Rise Apartments (RAL-1): - a 308-unit three-storey apartment complex fronting onto both No. 3 Road and Ryan Road.

SOUTH	<ul style="list-style-type: none"> Maple Village strata designated as multiple family residential. 	<ul style="list-style-type: none"> “Land Use Contract 022”: <ul style="list-style-type: none"> - an 87 unit townhouse development.
WEST	<ul style="list-style-type: none"> Designated as single family residential and park/school. The City owned park is located east of Maple Lane Elementary School and fronts onto Dunoon Drive and No. 3 Road. 	<ul style="list-style-type: none"> Single Attached (RS 1/E). “Comprehensive Development District (CD/124)”: <ul style="list-style-type: none"> - single-family homes fronting onto Williams Road, Dunoon Drive, Petts Road and Nevis Drive. “Land Use Contract 022” and “School and Public Use District (SPU): <ul style="list-style-type: none"> - A shared park-school site.

5. Public Consultation

Comprehensive public consultation has been undertaken and was an integral component in developing the Master Plan. A variety of strategies have been used to engage the public in the discussion about the Broadmoor Neighbourhood Service Centre, including creation of a project web page; a targeted telephone survey; neighbourhood distribution of a newsletter that provided information about the First Capital Realty development application, notification about the Master Plan Open House and a survey to inform the Master Plan process; City-wide notification about the Open Houses in local newspapers; presentations and meetings with local stakeholder groups; and two Open Houses. The Master Plan open house materials and newsletter with survey are included in the appendix.

Over the course of the consultation, SUCCESS, a not-for-profit immigrant and English as a Second Language service organization, was engaged to encourage Broadmoor community members to receive important information and provide feedback in their mother tongue. This included the translation of key print information, face-to-face interpretation services with Dunoon Drive neighbours and for participants at the Open Houses, and telephone support for any residents with comments or questions.

Stakeholder groups that have been contacted and provided the opportunity to review the redevelopment plans for Broadmoor Mall and the Broadmoor Neighbourhood Service Centre Master Plan include:

- Maple Lane Elementary School
- William Bridge Elementary School
- Hugh McRoberts Secondary School
- Steveston-London Secondary School
- South Arm Community Association
- Richlea Square and Broadmoor Mall tenants
- Dunoon Drive single family residents
- Maple Village townhouse residents
- Richmond Centre for Disability

Presentations were made to William Bridge and Maple Lane Elementary Schools, the South Arm Community Association executive, and the Maple Village townhouse residents. Members of the Richmond Centre for Disability approached the project team at the Open House and in e-mail to provide feedback about the site’s accessibility. Feedback from these stakeholders has been generally supportive of the shopping centre’s redevelopment.

The Master Plan newsletter was mailed to 4,005 residents in the Broadmoor community. The newsletter included an invite to the September 29 Open House and a neighbourhood survey. The Richmond Review and Richmond News were also used to advertise the September 29 Open House event City-wide. The Open House provided information about the Master Plan process, introduced the draft vision, guiding principles and objectives, and presented two land use options. The Open House also provided an opportunity for residents to return and/or complete the neighbourhood survey. Forty-four surveys were returned. In addition, a comment form was available at the Open

House and 10 were submitted at that time. The questions and results from the survey are included below for reference. A public consultation report was submitted to the City October 9, 2009 and is available under separate cover.

Survey Responses (44 responses received)

1. Please indicate your interest(s) in the Broadmoor Neighbourhood Service Centre Master Plan process: (52 responses – multiple answers allowed)

The majority of respondents (37) checked the box indicating that they are a resident of the Broadmoor Area.

- Resident of the Broadmoor Area 71 %
- Land owner in the Broadmoor Area 26%
- Business owner at the Broadmoor Neighbourhood Service Centre 2%

2. What do you like most about the Broadmoor Neighbourhood Service Centre (e.g., range of shopping options, close to home, access to transit)?(40 responses)

The majority of respondents (30 responses – 75%) noted the proximity of the mall to their home as their main reason for liking the Broadmoor Neighbourhood Service Centre.

- Close to home 75%
- Range of shopping options 42%
- Safeway/Grocery store 42%
- Access to transit 23%
- Bakery 18%

3. What types of stores/services would you like to see (e.g., beauty salon, photo finishing, other retail, restaurants, bookstore)? (42 comments)

Many comments focused around various types of grocery stores. Respondents' top request was for a produce market (19) with many comments referencing Kin's Grocery Store specifically. Twelve (12) respondents indicated a desire for a bakery and 11 for a butcher/fish store. Aside from these grocery requests, 15 respondents addressed a desire for restaurants. Comments also referenced a need for a beauty salon (13 comments).

- Produce Market/Kin's Grocery Store 45%
- Beauty salon 31%
- Bakery 28%
- Butcher/Fish store 26%
- Dollar store 24%
- Hardware Store 24%
- Drugstore 21%
- Restaurants 21%
 - Upscale (44%)
 - Family (22%)
 - Remainder with no preference for type
- Banks 14%
- Bookstore 12%

4. What are your top three issues with the Broadmoor Neighbourhood Service Centre (e.g., accessibility, services, etc.)? (37 responses)

The top issue raised by respondents was parking restrictions within the mall surface lot (e.g., ticketing of customers who used services of one mall but were parked in adjacent property) (10), followed closely by comments concerning the mall's appearance (8), and comments that the mall is not pedestrian friendly (6).

- Parking restrictions 27%
- Mall is unattractive, uninviting, outdated 22%
- Not pedestrian friendly 16%
- Lack of services 14%
- Larger grocery store needed 14%
- Mall entrance: locations/upkeep/signage 8%
- Mall vacancies 8%
- More washrooms are needed 5%
- Better restaurants are needed 5%
- Little green space/recycling 5%

5. What are your top three suggestions for improving the Centre? (34 Responses)

Responses to this question varied greatly, however, all pointed to general upgrades to the Centre. Eight comments were directed specifically toward improving the buildings appearance, while 5 were directed toward access and 6 toward improved parking. Eight of the comments referenced the quality and variety of stores and 5 requested better/more restaurants.

- Improve appearance 24%
- Improve parking 18%
- Greater variety of stores/services 15%
- Better/more restaurants 15%
- Improve access 15%
 - Vehicle (2 comments)
 - General comment (3 comments)
- Bigger grocery store 9%
- No residential 6%
- More washrooms 6%
- Bike facilities 3%
- Community centre 3%
- Improved safety 3%

6. What types of businesses and residences could you see integrated into the Shopping Centre? Please check all that apply: (44 Responses)

Retail development garnered the most support (27), followed closely by mixed-use development (21). While 12 respondents indicated a need for office space, 8 of these individuals specified medical office space. As for the building style and height, 14 respondents indicated that they would feel most comfortable with 6 storeys or less while 7 respondents felt townhouses would be most appropriate.

- Retail – 61%
 - 11% of whom noted specifically a Dollar store

- Mixed-use (e.g., commercial at grade with apartment/condos above) – 48%
- Low rise apartment (6 storeys or less) – 32%
- Office – 27%
 - 66% of which noted a specific office type to be doctor, dental, medicare
- Townhouses - 16%
- Mid-rise apartments/condos (e.g., greater than 4 storeys) - 2%
- Other:
 - No residential 11 %

7. Are there any transportation improvements you feel would benefit the Broadmoor Neighbourhood Service Centre (e.g., mid-block crossing, bike paths, better transit service, etc.)? (29 responses)

Respondents indicated that bike paths (8) would benefit the Shopping centre.

- Bike paths 28%
- None 14%
- Better bus facilities 10%
- Mid block crossing 10%
- Vehicle access 10%
- Better parking 3%
- Pedestrian access 3%

8. What community amenity improvements do you feel would benefit the Broadmoor Centre (e.g., child care space, library, community centre space, arts and culture space, seniors programs, etc.)? (33 responses)

Respondents indicated that they would like to see a library (16) and senior services in the Broadmoor Centre. Eight respondents indicated more broadly that they would like a community centre within Broadmoor.

- Library 48%
- Community centre 24%
- Seniors services 30%
- Child care 18%

9. What is your long-term vision for the Broadmoor Neighbourhood Service Centre? (35 responses)

The largest proportion of responses (15 respondents or 43%) indicated their long term vision for Broadmoor to be a centre with diverse retail stores, services and uses to meet the needs of the surrounding community. Other comments focused on parking, connectivity, types of stores, housing and community services, neighbourhood character and timing of development.

Public consultation has provided helpful insight to shape the Master Plan for the Broadmoor Neighbourhood Service Centre and in the design of individual buildings. Specific topics of attention were identified throughout the consultation:

- Parking and accessibility (includes pedestrians, people with disabilities, cyclists, automobiles);
- The range of services and stores (focus daily needs, services, lifestyle/medical office);
- The appearance (modernization and more appropriate 'welcome'); and
- Community amenities (community services for seniors, childcare, library, and bike facilities).

The majority of respondents to the survey and all comments reviewed on the Comment Form were in favour of redevelopment. In general, consultation with the broader community has confirmed that they would like to see the Broadmoor Neighbourhood Service Centre revitalized sooner than later.

The Community Long Term Vision

The consultation with the community has indicated their long-term vision for Broadmoor Neighbourhood Service Centre as a centre with diverse retail stores, services and uses to meet the needs of the community. The community also identified a preference for retail and mixed use buildings under 6 storeys in height with an architectural style that is modern and up-to-date.

6. Broadmoor Neighbourhood Service Centre Vision - A Sustainable Neighbourhood Hub

The Broadmoor Neighbourhood Service Centre is envisioned as vibrant, accessible and sustainable hub where people will be able to live, work, and meet their daily needs. The character of the Neighbourhood Centre will reflect the principles of sustainability and use a contemporary design that integrates durable and natural materials.

This vision will help establish a strong community identity and reinforce this area as the 'heart' of Broadmoor; this will be achieved with the following Guiding Principles:

Guiding Principles

1. Healthy places and socially integrated.
2. Reduced demand for energy and resources.
3. Interconnected circulation network.
4. Alternative modes of transportation.
5. Vital economy.
6. Compact community and human scale.

Each of the Guiding Principles proposes a number of policy objectives and strategies that will encourage the Broadmoor Neighbourhood Service Centre to redevelop in a way which meets the Vision for the Broadmoor 'heart'. The following framework provides an overview of the Guiding Principles, Objectives and Strategies which were well received throughout the community consultation; some aspects have been updated to reflect additional feedback from the community. Implementation considerations and tools such as the Official Community Plan, Zoning, Development Permit Guidelines have been noted and are further discussed in the Amenity, Infrastructure or Implementation sections of the Master Plan.

7. Guiding Principles & Policy Objectives

Guiding Principles	Policy Objectives & Strategies	Implementation Considerations
<p>1. Healthy Places and Socially Integrated.</p>	<p>The Broadmoor Neighbourhood Service Centre will provide for healthy places that encourage social interaction and promote a sense of community and belonging with a mix of uses.</p>	
	<ul style="list-style-type: none"> • Diversify the neighbourhood centre by encouraging a mix of uses in the centre and/or in a building. • Integrate commercial uses such as cafés and restaurants, to create important social spaces and street life that enhance social gathering opportunities. • Encourage a mix of housing types including market condominiums, smaller sized affordable units, and family oriented apartments. • Offer a range of unit sizes for different household types and incomes. • Encourage on-site daycare in new mixed use or residential buildings OR a cash-in-lieu payment to see the development of child care in a location nearby. • Provide the opportunity for a healthcare component to be integrated on site (e.g., Doctor’s office, pharmacy). 	<p>OCP Neighbourhood Centres policy</p> <p>Zoning to allow a wide variety of uses including residential, childcare, office, medical/pharmacy, restaurants, pubs, retail, and institutional uses.</p> <p>Implementation (see section 12)</p>
	<ul style="list-style-type: none"> • Create a vibrant commercial mixed use centre by encouraging more dense development. 	<p>OCP Neighbourhood Centres policy - Base FAR of 0.5 with additional density up to a maximum of 1.5 allowed with the provision of community amenities.</p>
	<ul style="list-style-type: none"> • Integrate Crime Prevention through Environmental Design (CPTED) principles to improve personal safety and security and ensure a safer neighbourhood, such as improved lighting and ‘eyes on the street’. 	<p>Development Permit Guidelines</p>
	<ul style="list-style-type: none"> • Ensure minimum universal accessibility standards to allow people to access the Broadmoor Neighbourhood Service Centre and to age in place. 	<p>Development Permit Guidelines</p>
	<ul style="list-style-type: none"> • Support the development of publicly accessible outdoor and indoor spaces, such as landscape nodes, outdoor green areas, plazas, path linkages and indoor meeting space, for residents and visitors. • Encourage the neighbourhood centre to support food security (e.g., Farmer’s Market, community gardens in public or semi-private areas, food stores). • Encourage increased cultural accessibility to support active participation in community life. 	<p>OCP Neighbourhood Centres policy & Zoning to identify appropriate semi-private indoor amenity area, exemptions and uses.</p> <p>Urban Design (section 11) and Amenity considerations (section 9)</p>

Guiding Principles	Policy Objectives & Strategies	Implementation Considerations
<p>2. Reduce the demand for energy and resources.</p>	<p>The Broadmoor Neighbourhood Service Centre will incorporate a wide range of green building strategies that support community and regional sustainability objectives.</p>	
	<p>Energy</p> <ul style="list-style-type: none"> Promote the development of a neighbourhood centre district heating system or micro-utility if feasible. 	<p>Ensure that required infrastructure upgrades /tie ins for individual buildings are located in accessible locations.</p>
	<ul style="list-style-type: none"> Design all buildings to take advantage of passive solar design including: building self-shading, external solar shading devices, and high-efficiency windows. Promote natural ventilation in building design. Encourage the use of solar photovoltaics, solar hot-water heating, wind power, and/or geo-exchange heating and cooling in individual building design. Ensure optimal wall to window ratio in buildings to reduce energy requirements. Design all buildings to take advantage of high thermal mass, super-insulated walls, radiant heating & cooling, and heat recovery ventilators. 	<p>OCP Neighbourhood Centres policy to mandate green building strategies and incorporate LEED* principles.</p> <p>Development Permit Guidelines require new construction to achieve a LEED Silver equivalency.</p>
	<p>Education</p>	
	<ul style="list-style-type: none"> Provide programmable thermostats for all commercial and residential uses and ensure individual metering for all utilities. 	
	<ul style="list-style-type: none"> Have a commissioning agent on all projects to ensure systems (building envelope, mechanical) are working efficiently. 	
	<p>Materials</p>	<p>*LEED is an acronym for Leadership in Energy and Environmental Design and is a green building standard overseen by the Canadian Green Building Council.</p>
	<ul style="list-style-type: none"> Enhance healthy indoor air quality by using adhesives, sealants, paint, and floor coverings with low emission ratings. 	
	<ul style="list-style-type: none"> Encourage use of recycled, recyclable and/or, regionally sourced building materials and certified wood products. 	
	<ul style="list-style-type: none"> Use effective construction and permanent waste diversion strategies to reduce the load on local landfills. 	
<ul style="list-style-type: none"> Integrate recycling capabilities into trash receptacle areas (commercial, residential and public realm). 		
	<p>Water</p> <ul style="list-style-type: none"> Integrate water conservation measures in site and building design to reduce indoor water consumption. (e.g., water meters, low flow toilets and fixtures, rain capture for irrigation). 	<p>Development Permit Guidelines</p>
	<p>Landscaping</p>	<p>Development Permit Guidelines.</p>

Guiding Principles	Policy Objectives & Strategies	Implementation Considerations
	<ul style="list-style-type: none"> • Enhance landscaping features with natural habitat pockets by using native planting species where possible that mimic local habitat. • Minimize heat island effect in parking lots by planting shade trees. • Plant podium roofs with gardens and natural habitat. • Reduce irrigation needs by using plants that require little or no water. <p>Stormwater and Climate Change</p> <ul style="list-style-type: none"> • Manage stormwater quality and quantity to lessen the impact on the City’s system. • Promote sustainable infrastructure (e.g., mark all sewer grates with reminder “Leads to fish habitat”). • Maximize the effectiveness of permeable areas to reduce runoff and increase infiltration. • Use bio-swales, where feasible, for treatment of parking lot stormwater run-off. 	<p>LEED Heat Island Effect - Roof Credit</p> <hr/> <p>OCP Policy and Development Permit Guidelines.</p> <p>LEED Stormwater management Credit</p> <p>Flood Construction Levels for residential habitable floor elevation at 2.9 m and commercial areas at 0.3 m above the crown of the fronting street (all elevations are geodetic).</p>
<p>3. Interconnected circulation network.</p>	<p>An interconnected circulation network will reduce distances between homes, work, and shopping and provide more intuitive connections to alternative modes of transportation thus encouraging less reliance on private automobiles.</p> <ul style="list-style-type: none"> • Reduce the need to use the private automobile for daily needs by providing an environment for local residents to walk, bike or take transit to a range of amenities and services. • Enhance pedestrian connectivity both within the site and to the adjacent neighbourhood. • Improve the connectivity of the Centre to the broader community by providing direct linkages to Maple Lane Park, Dunoon Drive, No. 3 Road and Williams. • Provide an enhanced connection from No. 3 Road to Dunoon Drive and Maple Lane Elementary School. • Improve connectivity of the site for transit and bicycle routes through appropriate design. • Create a hierarchy of access routes and pathways to accommodate a variety of transportation modes. • Ensure that vehicle access is direct and intuitive to the site. • Ensure universal access throughout the site (e.g., curb cuts and level entryways). 	<p>OCP Neighbourhood Service Centre policy</p> <p>Urban Design considerations (see section 11)</p>

Guiding Principles	Policy Objectives & Strategies	Implementation Considerations
	<ul style="list-style-type: none"> Encourage long-term large truck access from arterials. 	<p>OCP Policy for transportation networks near Neighbourhood Centres.</p> <p>Good Neighbour Pledge-Agreement.</p>
<p>4. Alternative modes of transportation.</p>	<p>Transportation Demand Management (TDM) strategies will encourage more innovative and efficient use of transportation resources and reduce greenhouse gas emissions.</p>	
	<ul style="list-style-type: none"> Encourage pedestrian-oriented and bicycle friendly design to support active lifestyles and provide residents with alternatives to the private automobile. Encourage streetscape improvements that create more accessible, efficient and liveable urban street design. 	<p>Urban Design consideration (see section 11)</p> <p>Infrastructure (see section 10)</p>
	<ul style="list-style-type: none"> Encourage shared transportation infrastructure for the neighbourhood by providing car share parking spaces (e.g., Cooperative Auto Network or Zipcar). 	<p>Zoning consideration - allow 1 car share space replace 6 residential or commercial stalls.</p>
	<ul style="list-style-type: none"> Incorporate strategies for reduced or more efficient parking requirements to minimize parking infrastructure costs and provide an incentive for people to use alternative modes of transportation (e.g., shared use of parking). Identify appropriate mechanism to guarantee shared use parking stalls are maintained (e.g., Land Title, signage). 	<p>Development Permit Guidelines to allow shared parking spaces between residential visitor parking and commercial stalls.</p> <p>Infrastructure (see section 10)</p> <p>Implementation (see section 12)</p>
	<ul style="list-style-type: none"> Encourage the provision of frequent transit by locating higher density development along transportation corridors. Design unique transit stops along Williams and No. 3 Road (e.g., integrated into building design with ample overhangs/awnings). 	<p>OCP Neighbourhood Centres and Transportation guidance - arterial roads policy.</p> <p>Development Permit Guidelines for transit shelter design.</p>
	<ul style="list-style-type: none"> Increase options for bicycle transport on site and within buildings by integrating bicycle racks, lockers, changing facilities, bike maintenance (air/water). 	<p>OCP Neighbourhood Centres and Transportation policy.</p> <p>Zoning consideration to permit private bike lockers and public bike racks.</p> <p>Development Permit Guidelines encourage changing facilities in commercial developments.</p> <p>Amenities (see section 9)</p>

Guiding Principles	Policy Objectives & Strategies	Implementation Considerations
	<ul style="list-style-type: none"> • Provide the infrastructure to encourage the use of alternative energy sources (e.g., metered electrical plug-ins for electric cars). 	Development Permit Guidelines ensure that required infrastructure upgrades /tie ins are located in accessible locations.
5. Vital economy.	An important component of a healthy community is the establishment of a vital economy over the long term. The Broadmoor Neighbourhood Service Centre redevelopment will play an important role in contributing to a healthy local economy.	
	<ul style="list-style-type: none"> • Support opportunities for a range of both permanent and temporary jobs by allowing a variety of retail, office, construction and other commercial service businesses. • Support neighbourhood daily needs by providing a mix of stores and services in a variety of store sizes. 	Zoning Considerations see Guiding Principle # 1.
	<ul style="list-style-type: none"> • Encourage the development of live/work units. 	Zoning to permit limited live/work uses.
	<ul style="list-style-type: none"> • Support the prosperity of commercial areas by integrating local residential units (and future customers or tenants) into the Centre. • Provide a range of dwelling unit sizes, including those that address the needs of local service workers in the community. 	OCP Policy guidance Neighbourhood Centres.
	<ul style="list-style-type: none"> • Discourage the development of large big box stores that could reduce the feasibility of smaller retailers 	Zoning and/or OCP policy consideration to identify maximum floor area allowable
	<ul style="list-style-type: none"> • Encourage the use of construction materials and development services from local suppliers and trades. 	See Guiding Principle #2.
	<ul style="list-style-type: none"> • Reduce site servicing costs and long term infrastructure maintenance by encouraging compact development. 	Infrastructure (see section 10).
6. Compact Community & Human Scale.	The Broadmoor Neighbourhood Service Centre will contribute to creating a complete community with a compact mixed use character that is human scale.	
	<ul style="list-style-type: none"> • Utilize developable land more efficiently by encouraging infill development at the Centre rather than creating a dispersed pattern of low density urban sprawl. 	OCP Policy
	<ul style="list-style-type: none"> • Create of a vibrant, mixed use, residential and commercial development with a range of amenities and services. • Favour pedestrians over cars in site planning and design. 	OCP Policy for Neighbourhood Centres and Zoning considerations - see Guiding Principle #1. Development Permit Guidelines
	<ul style="list-style-type: none"> • Increase density along Williams and No. 3 Road transportation corridors, making the existing neighbourhood more viable and thriving. 	OCP Policy- Neighbourhood Centres.

Guiding Principles	Policy Objectives & Strategies	Implementation Considerations
	<ul style="list-style-type: none"> • Elevate pedestrian corridors above driving lanes where feasible. • Promote above ground structured parking that is integrated into building design to get cars off of the pedestrian plane. • Provide pedestrian weather protection. • Provide outdoor lighting for pedestrian movement and not just parking lots. • Provide benches at gathering areas and along walking routes. • Divide large parking lots into smaller areas using landscaping beds to promote human scale. 	Infrastructure & Urban Design (section 10 and 11, respectively)
	<ul style="list-style-type: none"> • Provide public art that people can interact with. • Promote podium rooftop gardens in the overall design of individual buildings. 	Amenity & Implementation considerations (section 9 and 12 respectively)

8. Land Use Types and Densities

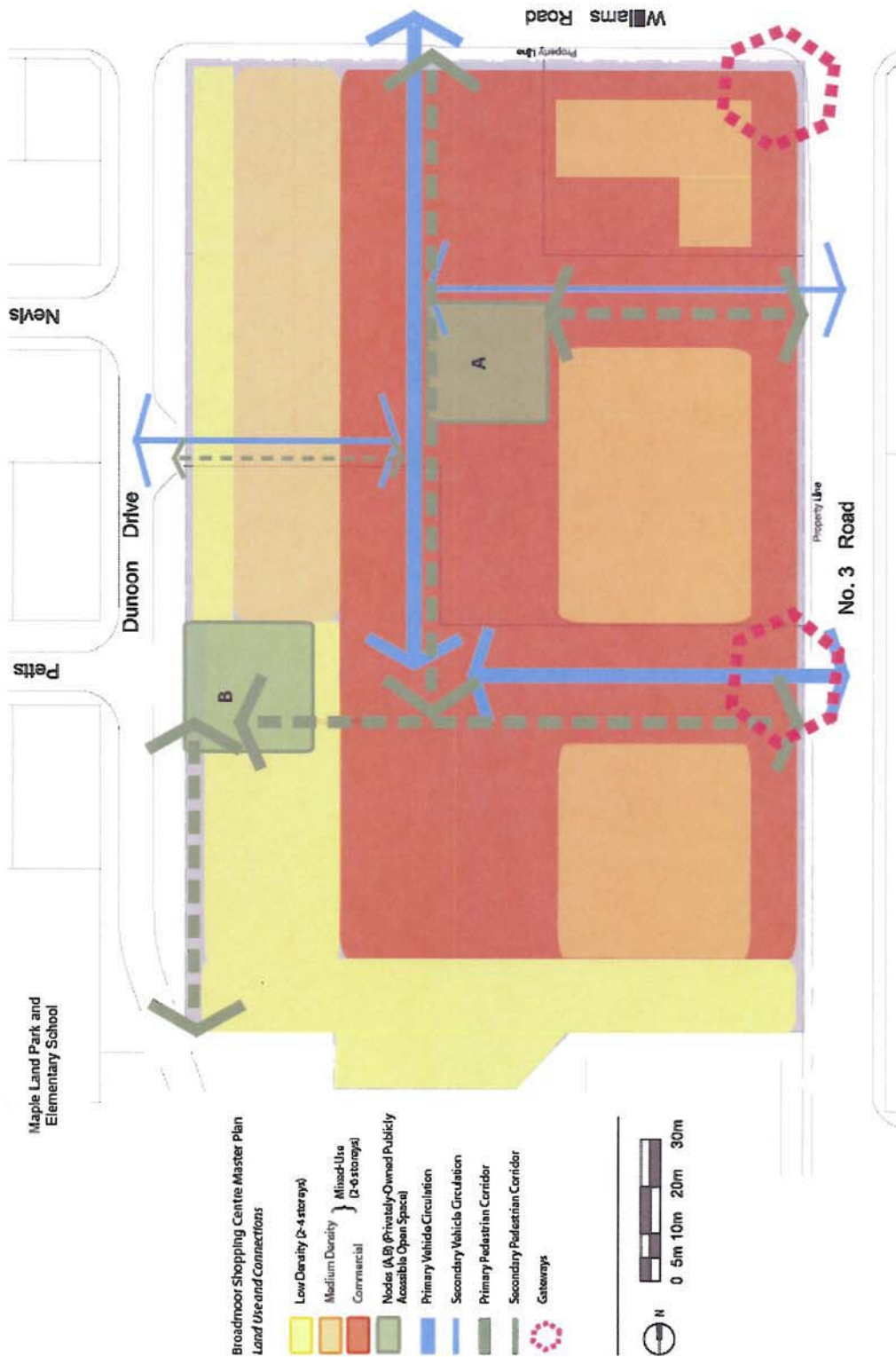
The Master Plan land use concept responds to the existing land use context of the surrounding neighbourhood, feedback received throughout the public consultation and the principles of sustainability. The Master Plan introduces new land uses and building forms to achieve the vision and guiding principles. The Master Plan land use concept includes commercial, residential and open space. This mixture of uses is envisioned to contribute to the creation of a vibrant neighbourhood core with opportunities to live, work and play. The number of dwelling units and population data presented below are approximate and have been used to provide guidance to the planning process. The numbers below are also to be applied relatively to each individual site within the Service Centre to ensure feasible redevelopment proposals.

Plan Specifications

Master Plan Site Area:	33,624.5m ²
Proportion Residential - exclusive of parking	60%
Proportion Commercial - exclusive of parking	40%
Floor Area Ratio:	0.5 base 1.5 maximum (with the provision of amenities)
Number of Dwelling Units:	Approximately 200-225 units
Additional Population	500 - 675 (range between 2.5 - 3.0 persons / household)
Privately Owned Open Space	0.16 ha (0.39 ac)
Heights Varied:	2 - 6 storeys (maximum 24.4m (80ft))
Residential Flood Level:	2.9m elevation
Commercial Flood Level:	0.3m above crown of fronting street

Land Use Plan

Broadmoor Neighbourhood Service Centre Land Use Concept



9. Amenities

There are four schools and a major city park within 800m of the development. South Arm Park has a number of playing fields, courts, walking trails, an outdoor swimming pool, and community centre. The Community Centre provides a number of programs and services, including a dedicated seniors' lounge and activity room, daycare room, gym and fitness areas, meeting and multi-purpose rooms, community policing and health department office. The Shopping Centre Master Plan should complement and not duplicate existing services or amenities in the Broadmoor community.

A review of the Census Canada demographic information suggests that the Broadmoor community is an aging population that is ethnically diverse. The Master Plan will integrate a variety of housing types and sizes to further encourage the diversification of the community. The housing would allow homes for aging residents wishing to downsize. Opportunities for affordable housing will be provided either on site or developed off site by meeting the City's Affordable Housing Strategy.

Although there is a larger aging population, the number of children in the Broadmoor neighbourhood is still expected to increase slowly. Broadmoor appears to have a shortage of out of school care spaces and group care for children under 3. The Broadmoor area will benefit from additional out of school care spaces.

In order to not duplicate existing community facilities, dedicated community space is not proposed directly in the Neighbourhood Service Centre. **Opportunities to enhance existing amenities will be encouraged through the expansion of existing City space and features.** The programming of this space will be determined through consultation with the neighbourhood and the City of Richmond. Consultation to date has identified the following amenity preferences: play ground equipment, child care, library, flexible meeting space, senior services, and better connectivity for pedestrians and bicyclists.

Maple Lane Elementary School, playground and park are adjacent to the Master Plan area within a 50-metre distance. An existing pathway connects the school grounds to Dunoon Drive. In general, the park, Broadmoor Neighbourhood Service Centre and residential areas can be better connected. To better connect the community with the neighbourhood 'heart', the pedestrian corridor along Dunoon will connect Maple Lane Park to an open space gateway and node aligned with Petts fronting on Dunoon. This green area provides for informal leisure for existing and future residents, visitors and employees, and a transition zone between the residential neighbourhood and the mixed-use character of the centre. This open space node is connected to another green open space gateway and node internal to the site that provides a central focus and gathering area via the development of a pedestrian spine between Dunoon and No 3 Road and internal to the site. The open spaces will be privately owned and publicly accessible 24 hours per day.

A secondary pedestrian route has been identified and along with upgrades to City sidewalks, will help connect the Broadmoor Neighbourhood Service Centre with the adjacent community. These routes run along the perimeter of the Master Plan area and one is internal to the site. Four gateways and nodes have been identified at prominent corners, at access points or internal to the site and are connected with pedestrian corridors to create a unifying and interconnected Centre.

10. Infrastructure

Transportation Related Aspects

The proposed Master Plan envisages a redevelopment of the site to be market driven in multiple phases over an approximate 30-year period and transforms the Broadmoor Neighbourhood Service Centre to a mixed-use environment including commercial and residential uses. The proposed commercial use will retain the existing function

as a Neighbourhood Service Centre serving the Broadmoor area, consistent with the existing OCP policy for this location.

The plan proposes that forty percent of the future developable floor area will remain commercial, and this value is expected to be nominally more than the existing commercial floor area of 10,189.5 m². Since commercial and residential traffic generally do not peak in the same time period, the addition of residential use onto a commercial development will provide many advantages including a more efficient use of the available transportation infrastructure and eliminating some of the vehicular trips which would otherwise travel on the surrounding road network due to internalization of trip movements between the residential and commercial components on the site.

The Service Centre Master Plan is intended to encourage more trips made by non-auto modes through the guiding principles built into the Master Plan, for example #3 Interconnected circulation network and #4 Alternative modes of transportation.

The proposed Master Plan specifically addresses pedestrian and bicycle connections, transit facilities, access, parking requirements and transportation demand management strategies with the intent to improve the transportation mode choices to and from the site, and achieve a better balance in the long term.

Pedestrian and Bicycle Connections

At present, pedestrian connections between the shopping centre and the residential neighbourhood to the west are not strong - a lack of permeability combined with incomplete sidewalks around the shopping centre contributes to an inconvenient pedestrian environment. Bicycle facilities are virtually non-existent, with the exception of compressed air available at the Petro Canada gas station. The redevelopment of the site also encourages significant improvements in the provision of on-site bicycle facilities to meet or exceed the bylaw requirement.

The Master Plan will redefine the connections, nodes and gateways through the site and form an integral part of the entire development concept. The design of the pedestrian and bicycle paths within and to/from the development site should be as direct as possible and generally meet the desired lines of travel. A warrant analysis was conducted for the existing pedestrian crosswalk on Williams Road near Dunoon Drive. The analysis confirms that an upgrade to a Special Crosswalk is warranted based on the observed traffic and pedestrian volumes, however upgrade to Pedestrian Signal is not warranted.

Transit Facilities

The Centre is well served by public transit with 3 bus stops near the corner of No.3 Road (northbound and southbound) and Williams Road (westbound), and 1 stop at Williams Road (eastbound) close to Dunoon Drive. Currently, there are 3 bus routes serving the location:

- Route 403 & 480 with 10-15 minutes frequency that go along No.3 Road connecting Steveston and Richmond City Centre (onward connection to Canada Line stations to Downtown Vancouver and YVR);
- Route C93 connecting Steveston and Riverport with 30 minutes frequency.

Additional transit service along Williams Road has been identified as an opportunity to link the community with the South Arm Community Centre. It is recommended that the existing transit services in the adjacent area be further reviewed as and when necessary to reflect the changes in travel patterns.

The site is well connected to regional transit systems. The connecting bus routes to the Canada Line stations will benefit from the new on-site population resulting in an increase in ridership. Opportunities also exist for bus shelters to be integrated with the building design.

Access

Site accesses on No. 3 Road, Williams Road and Dunoon Drive will be consolidated through the implementation of the Master Plan. Commercial traffic should ultimately access the site via the arterial streets (No. 3 Road and Williams Road) where, as illustrated in the Master Plan, two all-movement located on No. 3 Road and 1 all-movement access on Williams Road. These accesses will accommodate all traffic including servicing trucks to/from the site. An alternative arrangement was evaluated to install traffic signals at the south access on No. 3 Road and have the north access restricted to right-in/right-out only. This alternative arrangement including a warrant analysis should be reviewed at later phases (i.e., Phase 3) for the long-term 2031 horizon when reviewing the site access design on No. 3 Road. Note that the Ryan Road intersection is about 100m south of the development's south access on No. 3 Road. As such, the selection of intersection control methods should also consider the requirement of traffic progression along No. 3 Road and traffic interaction between intersections.

At present, servicing of the Broadmoor mall and Richlea sites occurs via the City owned lane between Dunoon and No 3 Road. First Capital Realty is proposing to consolidate the two residential parcels along Dunoon, the Mall and the City - owned lane into a larger development parcel that is more appropriate for redevelopment. This will require First Capital Realty to follow the City's Road Closure and Sale procedure. If approved, the lane will be closed and the existing service that the lane currently provides needs to be accommodated elsewhere and is proposed to be from Dunoon.

This proposal will ensure that the existing service level that was once provided by the lane remains in such a way that ensures the Service Centre is well integrated with the neighbourhood. A new access from Dunoon Drive between Petts and Nevis provides this integration and maintains a sufficient level of access points from and to the neighbourhood.

On-site circulation involves the consideration of efficient and safe access to/from the site by all modes, including bicycles, pedestrians, transit and vehicular traffic to on-site parking and loading facilities. Site generated traffic will be well distributed so that there will be no concentration of traffic movements at critical locations.

The internal circulation network will define a pedestrian route network to minimize potential conflicts with vehicular traffic. Internal pedestrian routes will generally follow commercial frontages and provide clear connections within and through the site. Bicycles will access the site directly from Williams, as well as Dunoon Drive, and will be integrated with the Williams Road bike route.

Vehicle Parking

Parking issues have arisen in the past at the Broadmoor Neighbourhood Service Centre Master Plan. Customers do not recognize the different ownership between sites and this has led to conflicts between customers, staff and shop owners. This conflict also creates inefficient use of on-site parking supply (i.e. parking spaces not being able to be shared by all customers).

The Master Plan proposes a common pool of on-site parking for commercial use. The concept of 'shared' parking also allows flexibility in meeting the parking requirement particularly during the various construction phases, though parking supply for each building phase should preferably be self-sufficient in order to maintain appropriate parking supply/demand balance in each commercial. Parking for residential use should be provided separately in secured parking areas, but residential visitor parking spaces can be shared with the commercial parking supply in mixed-use development. This is a common approach as in other mixed-use projects.

The Master Plan commercial parking requirements were analyzed using the City's current bylaw requirements. At Phase 2, the total commercial parking supply in the Master Plan area is 418 stalls whereas the requirement based on

current bylaw is 425 stalls. The second phase proposes significant Transportation Demand Management (TDM) strategies to mitigate the reduced parking supply associated with that phase (see TDM below). In the longer term, when Phase 3 is developed, the total parking supply is 5% more than the current bylaw requirement. It is anticipated that parking demand for residential and commercial uses will decrease over time as alternative transportation modes are developed further and become more acceptable for day-to-day commutes. The proposed parking supply/requirement balance should be reviewed again when development of this phase proceeds.

The residential parking bylaw requirement is 1.5 stalls per dwelling unit plus 0.2 stall per unit for visitor parking¹. The actual peak parking demand is anticipated to be lower than the bylaw requirement due to (1) the mixed-use effect of the project which generally reduces travel demand, (2) the proposed transportation demand management measures to be implemented with the Master Plan (see further below), and (3) the parking requirement can be anticipated to decrease over time as the area continues to develop and regional and local transit services improve.

The Master Plan approach to residential parking proposes a requirement that reflects the size of the dwelling units or the numbers of bedrooms, as these parameters are found to be more closely correlated to the actual parking demand and affordability. The following minimum parking rates are proposed and to be reviewed in conjunction with the development applications:

- Studio 0.5 stall per unit
- One Bedroom 1 stall per unit
- Two Bedrooms 1.5 stalls per unit
- Three Bedrooms or more 2 stalls per unit
- (Rates inclusive of 0.1 stall per unit for visitor parking)

These rates are considered too low for redevelopment that is anticipated to occur in the short term (i.e. Phase 2) and the existing parking bylaw requirement will be applied in concert with adequate Transportation Demand Management strategies to reduce the required parking by 10%. See Appendix for Bunt and Associates Traffic Impact Assessment parking details.

Bicycle Parking

To encourage the use of alternative modes of transportation and to support the proposed residential parking rates, an adequate supply of bicycle parking spaces should be provided. These will be provided in combination with other strategies such as ease of access and direct connectivity through the site and to/from the external areas. Bicycle parking requirements are based on the current bylaw and should be reviewed, as and when necessary, in light of the overall planning objectives. See Appendix for Bunt and Associates Traffic Impact Assessment bicycle parking details.

Transportation Demand Management

General principles for the Transportation Demand Management (TDM) strategy for the site are provided below. These should be monitored throughout the implementation of the Master Plan so that the transportation planning objectives of the overall Master Plan can be maintained at all times. The following themes cover the general principles for the TDM plan to support the proposed mixed-use development applications at the Service Centre:

1. *Shared Parking*

- Shared parking exists virtually in all mixed-use environments where the overall parking demand is 'dampened' due to the fact that the peak parking demands from individual uses do not occur at the same

¹ As noted earlier, residential visitor parking can be mixed with commercial parking, as in other mixed-use projects, due to their temporal variations in parking demand.

time. As such, provision for lowering the required parking bylaw requirement would not cause any undesirable impact;

- An example of shared parking is residential visitor parking to be mixed with commercial parking, since these uses peak at different times and hence no separate residential visitor parking spaces are required in practice;
- Where feasible, develop an easement agreement among the owners of the properties within the Master Plan area, i.e. Broadmoor, Richlea and Petro Canada, to allow commercial parking spaces to be shared among all individual commercial tenants and customers.

2. *Car-Sharing*

- Car sharing has become more popular in Metro Vancouver, for example those operated by Zipcar and Co-operative Auto Network;
- Provide spaces for car-sharing parking located in the ground level commercial parking area; this allows 24/7 access;
- Where appropriate, developers will contribute to the purchase of car-sharing vehicle(s) located on the site. These may be used by residents on the site, commercial employees and the general public.
- In consultation with Car co-op service providers, vehicle(s) will be purchased by the developer or applicant and be available for the residents of the Master Plan area. Parking spaces for car sharing vehicles will be provided close to a residential unit.

3. *Bicycles and Pedestrians*

- Provide enhanced end-of-trip bicycle facilities on-site including Class 1 bike storage within the mixed-use buildings and Class 2 bike racks installed near building entrances;
- Enhanced end-of-trip bicycle facilities will be provided for each development phase within each of the buildings. They will be located close to the bicycle storage rooms and bike racks. These facilities include showers and changing rooms. Direct and safe bicycle paths to/from the future bicycle storage rooms and the existing Williams Road on-street bicycle lanes will be provided.
- Provide clear and safe pedestrian paths to/from and within the Site, including an upgrade of the Dunoon and Williams pedestrian crossing to a Special Crosswalk (upgrade to Pedestrian Signal is not warranted).
- Provide signed bicycle/pedestrian network to/from the site.

4. *Transit*

- Integrate shelters for bus stops fronting the site, included with transit system maps and related travel information and other facilities which can help promoting the use of transit services;
- Bus shelter(s) along No. 3 Road and/or Williams Road will be integrated into the design of redeveloped buildings at the developer's/applicant's cost. The applicant will consult with TransLink and Coast Mountain Bus Company as to the best location for the shelters and way to promote bus services in the area.
- For ultimate build-out, a mini transit plaza should be considered along No. 3 Road to accommodate existing and future bus stops and lay-bys.
- Where appropriate, consider providing subsidized transit passes, e.g. commercial employees and residents.

Neighbourhood Traffic Calming & Additional Transportation Study

The proposed on-site traffic circulation and site access arrangement seeks to direct large truck commercial traffic via the arterial streets (No. 3 Road and Williams Road) in the long term. However as the number of access points to the site will be reduced by more than 50% over the long term redevelopment of the Service Centre, remaining accesses need to be carefully considered throughout an individual site's redevelopment proposal.

To further mitigate any undesirable impact, traffic calming measures should be considered and implemented, as required, in consultation with the stakeholders including nearby residents, schools, etc. In subsequent phases of the site's redevelopment (Phase 3 -5), a traffic calming study should be conducted to understand the local residents' concerns, to identify any change in the number of on-street parking spaces and to assess whether traffic calming measures are warranted. Traffic calming measures will be at the developer's cost and may include:

- Corner bulges on Dunoon Drive to narrow traffic lane width, shorten crosswalk distance and reduce vehicle speed; this would be desirable at later redevelopment phases (i.e. Phase 3 -5);
- Marked crosswalk at Dunoon Drive south of Petts Road with a 30 km/h sign approaching the park/playground; and
- Speed humps on Nevis Drive and Petts Road.

At present, an existing marked pedestrian crosswalk is located west of Dunoon Drive on Williams Road. As noted earlier, this crosswalk will be upgraded to a "Special Crosswalk", but not to "Pedestrian Signal" (as determined in a Warrant Analysis prepared by Bunt & associates available under separate cover).

Additional transportation studies will be required for each rezoning application in subsequent phases (i.e., Phases 3-5) to assess:

- parking demand;
- current best practices of Transportation Demand Measures; and
- the need for off-site transportation improvements for pedestrians, cyclists and vehicles.

Utilities and Servicing the Master Plan Area

The City is committed to constantly maintaining and upgrading its public works infrastructure and service. The City schedules and budgets for infrastructure projects through the Capital Program and requires developers to provide and/or cost share the provision and maintenance of utilities. The OCP policy also prioritizes older areas of the City as well as areas earmarked for new development for sewer infrastructure and service upgrades.

At a neighbourhood level, the centres are intended to meet community-wide needs. Future planning associated with the Capital Program should integrate essential servicing requirements for the Neighbourhood Centres.

The Broadmoor Neighbourhood Service Centre Master Plan will integrate additional land uses (i.e., residential) into a predominantly commercial service centre. Adding a residential land use involved the re-evaluation of servicing needs as there will be additional and different demand or use of utilities.

Water

The Shopping Centre is well served by domestic/fire water. The minimum available flow from the existing watermain system along the Williams and No 3 Road development frontages is 426 L/s at 20 psi and significantly exceeds the anticipated maximum site domestic/fire water demand. The maximum site domestic/fire water demand will not exceed 250 L/s. therefore the existing public watermain system will accommodate future redevelopment as proposed in the Master Plan.

Storm

Stormwater management is an important consideration in the redevelopment of the Neighbourhood Service Centre. The storm sewer must have adequate capacity to accommodate design storm events (i.e., 1 in 10 year return). The existing storm sewer along First Capital Realty's (FCR) site frontages (Dunoon Drive and south side of Williams Road) are not adequately sized to serve the proposed redevelopment of the northwest area of the Shopping Centre.

An analysis of the future redevelopment of adjacent sites (Petro Canada and Richlea) within the proposed Master Plan concludes that the ultimate upgrade scope remains the same as that required by upgrading the FCR frontage.

Storm sewer upgrade along development site frontages are typically a development requirement and applicants will be expected to upgrade the storm services along their frontage. For more details about the First Capital Realty sewer upgrade requirement please see the Storm Analysis prepared by MPT Engineering available under separate cover). Future redevelopment applications will also be encouraged to reduce impervious surfaces and hence water run-off by using a variety of mechanisms, as identified in the Guiding Principles in the Master Plan.

Sanitary

The current City Standards require sanitary sewer to be a minimum size of 200mm or greater in order to adequately accommodate the First Capital Realty Phase 2 development proposal. The First Capital Realty proposal also requires the relocation of sanitary services from a lane and utility ROW to accommodate the new development fronting Dunoon and Williams as well as upgrading the existing 150mm sewers on the east side of Dunoon and south side of Williams. The redevelopment of all properties in the Master Plan area has been considered in the sanitary analysis. The ultimate upgrade scope remains the same with the exception of one pipe segment in which the ultimate upgrade increases by 50mm for a specific portion of sanitary sewer. See the Sanitary Analysis prepared by MPT Engineering for detailed information - available under separate cover.

Energy and Communications

In order to meet the energy requirements of the future redevelopment proposals, future redevelopment should consider the opportunity to integrate alternative energy supply into building design and mechanical systems, as outlined in the Guiding Principles of the Master Plan.

To the extent possible energy and communication services should be located underground. BC Hydro, Telus and Shaw have identified new utility pole requirements and underground servicing ducts to service the First Capital Realty site. These utilities will be under a Municipal Access Agreement and/or in a ROW registered by the utility company.

11. Urban Design

The Broadmoor Neighbourhood Service Centre is envisioned as a compact mixed use hub with a mix of housing, shops and services. The centre will be the 'heart' of Broadmoor where people will be able to live, work, and meet their daily needs. The character will reflect a contemporary design that integrates durable and natural materials. The Centre will be pedestrian oriented with public spaces where people can meet and pedestrian paths that link to adjacent neighbourhoods and parks. The following guidelines will contribute to the creation of a compact, mixed use community that meets the vision established for the Neighbourhood Centre:

The Broadmoor Neighbourhood Centre is envisioned as vibrant, accessible and sustainable hub where people will be able to live, work, and meet their daily needs. The character of the Neighbourhood Service Centre will reflect the principles of sustainability with a contemporary design and use of durable and natural materials.

Form and Character

In the Master Plan concept, buildings are arranged to create a functional commercial node with a more urban character and respond appropriately to the adjacent neighbourhood context. Buildings vary in height from two to six storeys and contain a variety of commercial spaces and residential units.

- the Master Plan area exemplifies a sustainable, durable and contemporary design character;
- buildings are placed along the perimeter of the site, close to the property line along No. 3 Road and Williams Road to reinforce building frontage continuity, especially along No. 3 Road;

- large open surface parking areas to be partially screened from direct views from the street (using a combination of landscaping and lattice/arbours structures);
- building frontage building heights vary between 2 and 6 storeys;
- density is greatest along the main arterial of No. 3 Road and the northeast corner of the site at Williams and No. 3 Road, where a public urban space and architectural features would establish a landmark at this neighbourhood intersection and key gateway;
- residential units are located above commercial uses and townhouse forms are at ground level when adjacent to existing residential areas;
- residential units above commercial uses along No. 3 Road and Williams Road to be setback from the edge of the commercial/parking floors so that the streetwall is perceived to be not higher than 4-storeys;
- buildings of various heights and massing create identifiable nodes and interest, particularly along No. 3 and Williams;
- commercial retail units (CRU's) at ground floor to have direct pedestrian access from the public sidewalk;
- decorative pavement to extend from public sidewalk to the building face where there is no substantial grade difference;
- building facades are animated by views into active retail space;
- if no fenestrations provided, housing forms wrap around otherwise blank edges of internally oriented commercially space;
- an identifiable mass and/or landscaping feature will be created at the entrance to Dunoon by incorporating a feature "ending" to the last and northerly townhouse block on the Williams Road portion;
- there will be residential units suitable for all family types, including opportunities for ground-oriented housing, and upper level apartment/condominiums with access to useable roof space;
- where the street frontage is comprised of residential development at grade (e.g. along Dunoon), buildings will:
 - have their major entries onto Dunoon or the perimeter of a privately-owned publicly accessible areas;
 - be developed with entry transitions and semi-private outdoor spaces; and
 - will include steps and changes in grade, fences, gates, low walls, hedges and other plantings.
- where buildings are located immediately adjacent to existing residential areas, upper storeys are stepped back to reduce overlook concerns and minimize massing;
- residential windows and balconies overlook common areas and public streets, providing "eyes on the street";
- ground-oriented commercial units front internal surface parking areas, front No. 3 Road and portions of Williams Road providing an active streetscape with direct pedestrian access from the street sidewalk;
- large buildings blocks are architecturally broken down into an expression of smaller street-fronting retail with varied frontages;
- building and landscape design at the corner of Williams and No. 3 Road is distinctive and welcoming;
- continuous weather protection is provided along commercial building frontages in the form of relatively continuous canopies and awnings;
- commercial units provide proportional and abundant glazing at street level to contribute to an active and interesting streetscape;
- there will be no extensive blank walls or obscured windows along the street frontage, at grade or on upper levels;
- streetscapes (defined by building heights and setbacks, sidewalk and landscaping) are consistent with a more urban overall character and compatible with the general character of the master plan area, and are complementary to the existing neighbourhood context;
- terracing and building setbacks on upper levels of taller (over 4 storeys) street-wall buildings are employed to create interest, improve access to light and to reduce bulk;
- height and massing are varied on street buildings to create a diverse and well-articulated shopping area;
- building articulation, glazing and a variety of materials are used to prevent long, featureless facades;
- awnings and overhangs provide shade in the summer and weather protection along pedestrian routes, at the entrances of shops and residences;

Broadmoor Neighbourhood Service Centre Master Plan

- materials, colours and elements such as light standards, benches, fences and trash receptacles, contribute to a sustainable, durable, contemporary design character;
- local and sustainable products are used wherever possible (e.g., wood, recycled or renewable materials).

Flood Plain Construction Levels

- protruding retaining walls necessary to meet flood elevation levels are screened from view with landscape planting or banks (Note: for direction on treatment of road frontages, Section 2.10.2 (a) "Attractive, Accessible Street Frontages, pages 2-116 and 2-117 of the City Centre Master Plan (CCAP) will be referred to. See pages 3-29 and 3-30 of the CCAP for direction on concealing parking below grade).

Key Gateways, Neighbourhood Nodes and Pedestrian Corridors

To create a Neighbourhood Service Centre that invites and welcomes the community, a series of pedestrian connections, neighbourhood nodes and gateways have been defined. As shown on the Broadmoor Master Plan Concept, two landmark gateways are identified: one at the key access to the commercial centre from No 3 Road and the second anchoring the corner at the intersection of Williams Road and No. 3 Road. One neighbourhood node (A) provides an internal gathering and heart for the Service Centre and a second neighbourhood node (B) serves as the key pedestrian access from Dunoon.

The neighbourhood node (A) internal to the site is situated near the centre of Master Plan area. The node is well connected by pedestrian corridors to help to achieve seamless integration with the adjacent neighbourhood. The central node also serves to organize the interior parking area into two smaller parking clusters and is large enough that it could include a light retail/structure (e.g., coffee, convenience kiosk, floral cart)

Four vehicle entries and various pedestrian corridors are identified in the Master Plan. Pedestrian routes run through the site and become an extension of the adjacent neighbourhood circulation network through the Neighbourhood Service Centre and link to the city sidewalks along its periphery.

General Principles

- the Master Plan area is permeable, safe, welcoming and accessible to people of all ages and abilities;
- prominent corners and entry points are designed as gateways that identify access points to the commercial area and routes into the neighbourhood;
- a neighbourhood node internal to the site is designed as a place to gather and interact with residents and visitors;
- the Broadmoor Master Plan identifies primary and secondary pedestrian corridors through the site and into the neighbourhood to connect to the surrounding neighbourhoods and Maple Lane Park;
- the pedestrian routes are direct, universally accessible and can accommodate a range of uses (e.g., wheelchairs and strollers).
- sidewalks and pedestrian corridors are well-defined through a combination of surfaces, landscape features and human-scale lighting;
- transit stops are visible and easily accessible by pedestrians and cyclists;
- buildings adjacent to transit stops integrate transit shelters into building and/or urban design with weather protection (e.g., awnings, overhangs and spaces for waiting);
- stairs and ramps are provided to access above grade entrances to residential and commercial units from the public realm;
- elements such as lamp standards, benches, fences and trash receptacles within the public realm are consistent in design and contribute to a sustainable, durable, contemporary design character;
- trees and other landscape features contribute to an attractive and comfortable public realm;

- trees, shrubs and appropriate landscaping frame pedestrian routes, reinforce the alignment of the pedestrian corridors through the site and add colour, texture and interest around the site;
- seating (seating walls or benches integrated to planters, or other) are provided along all pedestrian routes and in the central neighbourhood node;
- primary pedestrian corridor routes through the Master Plan area will be identifiable by pavement colour and texture, and will be separated, where feasible, from parking areas, and driveways;
- public art will contribute to the overall character and vibrancy of the service centre.

Gateways & Neighbourhood Nodes

There are two landmark gateways and two neighbourhood nodes envisioned for the Master Plan area. These serve as a welcome to the service centre and provide an opportunity for social interaction or seating. They are envisioned to enhance the quality of the urban environment for the benefit of land owners, tenants and residents. Key features of each gateway and node are identified below.

Williams and No. 3 Road Gateway

- the gateway at Williams and No. 3 Road will integrate an identifiable landmark feature consistent with the general character of the Master Plan, which could include a unique building design or landscape feature;
- the gateway will integrate site signage that identifies the service centre and provides directional information to key focal points in the community or at the service centre;
- the gateway functions as the welcome to the 'heart' of Broadmoor;

No 3 Road (south) Gateway

- this gateway provides the primary vehicle access and pedestrian corridor to the service centre from No. 3 Road; the primary pedestrian corridor extends further to the east and provides access to the adjacent neighbourhood from No. 3 Road;
- this gateway will be designed to open up the entrance to the shopping area (to views) from No. 3 Road and highlight the beginning of the main pedestrian route and connection to Dunoon Drive and Petts through the neighbourhood center;
- integration of all modes of transportation, safe and accessible design are the primary organizing principles for the design of this gateway;
- the gateway will be predominantly hardscape complimented by vegetation and corner architectural feature on adjacent buildings;
- opportunities for gathering and informal interaction through the integration of landscape or architectural elements should be explored;
- the gateway will integrate site signage that provides directional information to key focal points at the service centre;

Central Plaza Node (A)

- at the centre of the service centre this node is also an anchor associated with the neighbourhood and is 800 m² in size;
- is internal to the site and it is the organizing space within the central surface parking area;
- provides a central space/structure as a node in the middle of the central parking area to break the extent of paved parking surfaces into two smaller, friendlier parking clusters and organizes the parking area vehicular circulation;
- contains a distinguishable feature such as a light structure retail/kiosk and associated plaza with seating, designed to facilitate gathering as well as green landscaped areas to create a buffer to the surrounding parking areas and vehicular circulation;
- will include benches, waste receptacles and could be the place for a public art piece as a tall vertical element that serves as a landmark that identifies the service centre.

Dunoon Drive Node (B)

- located along Dunoon Drive across from Petts Drive, this space identifies the western entrance to the Primary Pedestrian Corridor to No. 3 Road through the neighbourhood service centre;
- encourages pedestrian connectivity between Maple Lane Park and the service centre, and offers a key connection between park/neighbourhood and No. 3 Road;
- establish a break along the continuous built frontage along Dunoon Drive and is 800 m² in size;
- adjacent buildings will be designed to ensure good access to sunlight and will front onto this area;
- reinforce safety by implementing “eyes on the street” principles with clear overlook from any adjacent commercial or residential buildings, with individual residential units oriented towards and having direct access to the open space; where possible individual front doors should open along the gateway edge sidewalks;
- signage provides directional information and identifies the service centre;
- benches, lighting and waste receptacles are provided.

Primary Pedestrian Corridors

No. 3 Road to Dunoon Drive E-W Pedestrian Corridor

- a centrally located, landscaped pedestrian spine that extends parallel to the vehicular access route and provides a direct connection from No 3 Road to Dunoon Drive and Petts;
- includes decorative pavement and a double row of trees to highlight the east-west primary pedestrian corridors through the Master Plan area;
- will include a 2.5 m wide paved path with a 1.5 m wide boulevard for tree, shrubs or other vegetation on each side;
- integrate coloured pavement (contrasting with asphalt on parking/drive aisles) and pedestrian scale lighting;
- integrate paved bump-outs with landscape features and seating areas along the drive aisle of this corridor, if feasible integrate parallel parking or another design solution to ensure pedestrian feel protected from the drive aisle at this edge;
- ensure a vertical element (signage, gateway feature) is provided at the termini (No 3 Road (south) and Gateway B discussed above) to draw people through the corridor;
- should be designed to be durable and include shade trees.

E-W Access Pedestrian Corridor

- this is a primary pedestrian corridor to the internal neighbourhood node (A) from the northern access on No. 3 Road, and links to the internal north-south pedestrian corridor network;
- the corridor will be a paved 2.5 metre wide sidewalk allowing a 1.5 metre wide boulevard for trees, trees grates and seating along the edge of the commercial parking areas;
- the corridor will extend along the internal storefronts or active building facades and will include raised crossings where vehicles cross its path.

N-S Internal Pedestrian Corridor

- provides a direct internal corridor between Williams and the two main E-W Primary Pedestrian Corridors connecting through the site with the internal commercial services;
- includes decorative or coloured pavement and a row of trees to highlight the north-south primary pedestrian corridors through the Master Plan area;
- is located along commercial frontages to the east of the development, where possible, and connects Williams to the internal node and the two east-west pedestrian corridors;
- facilitates the integration of the service centre with the pedestrian network and connecting to surrounding residential areas;
- provides pedestrian scale lighting, signage, waste receptacles and seating along the pathway.

N-S Pedestrian Corridor on Dunoon from Petts to Maple Lane Park

- a enhanced pedestrian realm is desirable to extend along Dunoon from the Dunoon Drive node at Petts to the south portion of the master plan area to highlight and reinforce the linkage to Maple Lane Park;
- integrates with Maple Lane Park by incorporating strong and well identifiable public use pedestrian corridor along Dunoon, toward Maple Lane Park;
- encourage linkages to Maple Lane Park and Petts Roads so that residents can easily access the service centre via pedestrian friendly corridors rather than through parking and loading driveways, or by using the car;
- facilitate and allow views to the site that can be seen from Maple Lane Park; therefore providing a highly integrated pedestrian corridor connected with two gateways to access the shopping area, from Dunoon and the southern portion of the site.

Secondary Pedestrian Corridors

- these corridors are extensions of the Primary Pedestrian Corridors and complete the pedestrian circulation network. They extend along the internal and external frontage of the residential and commercial buildings and include City sidewalks along the periphery if not identified on the Master Plan concept.
- pedestrian crossings will be enhanced to be safe and highly visible at No. 3 Road and Williams Road to facilitate strong linkages to the Service Centre and to the surrounding neighbourhood to the north and east.

Parking, Loading and Access

Surface parking is limited to convenience parking for retail shops, while most commercial and residential parking is located within the building envelope on the first or second level.

The Broadmoor Neighbourhood Service Centre will:

- provide parking organized in small clusters, contain the parking areas within the centre of the site and minimize the amount of exposed surface parking;
- surface parking exposed to views along Williams Road frontage will be partially screened from views (incorporating a combination of landscaping, low lattice fence (4 ft.) and trellis/arbour structure);
- provide a balanced supply of parking that meets the residential and commercial needs of the development, while supporting and encouraging alternative modes of transportation;
- provide ways for commercial loading and service vehicles to enter and exit the shopping area from No. 3 Road and Williams Road and ultimately not from Dunoon;
- utilize trees and landscaping to separate sidewalks from parking areas to protect people from vehicle traffic and create a pleasant pedestrian zone;
- provide clusters of small car parking spaces combined with full size parking spaces to introduce landscaping islands with trees and other appropriate vegetation to facilitate natural drainage in the parking area, and to provide shade and visual relief of the parking surface;
- bicycle parking facilities are provided at all residential and commercial building entrances;
- when vehicle parking is located within a building, the parking structure will be screened from view, either by wrapping the parking with residential or commercial units, or through the use of architectural features such as louvers;
- loading areas integrated as part of the building(s) provided with appropriate visual screens and/or gates;
- parking lots and structures are well lit and designed according to CPTED principles;
- surface parking lots are landscaped with trees; and
- parking areas, building entrances, sidewalks and public spaces are designed to be safe and accessible to people of all ages and abilities.

Green Buildings and Sustainable Infrastructure

The Broadmoor Service Centre developments will incorporate innovative approaches for green infrastructure and green buildings. Developments will flexibly achieve comprehensive green building and infrastructure strategies that

address on-site rainwater management, energy efficiency and renewable energy production, potable water conservation and waste minimization.

At the minimum, the buildings in the development will meet By-law No. 8385, "Green Roofs and Other Options Involving Industrial and Office Buildings Outside the City Centre". Other approaches to green buildings will be considered such as those required in the City Centre Area Plan (e.g., LEED rating system and credits), or LEED Silver Certification or equivalency.

The Broadmoor Service Centre will design buildings and site infrastructure that:

- minimize the use of energy and reduce Greenhouse Gas Emissions;
- use less potable water;
- use resources efficiently and incorporate sustainable building materials;
- mitigate, manage, and clean as much rainwater onsite as possible;
- reduce the generation of waste through careful design and construction practices;
- incorporate ways to improve indoor air quality, noise, noxious emissions and dust; and
- consider opportunities for urban agriculture on the site.

12. Implementation

Development Parcels & Phasing

The City has started using an Implementation Strategy approach in other area plan processes to define how development will pay for the community amenities, servicing and infrastructure elements envisioned for that area (e.g., City Centre Area Plan; West Cambie Area Alexandra Implementation Strategy). The existing examples of implementation strategies address places much larger in area, for example West Cambie is approximately 655 acres in size. The Broadmoor Neighbourhood Service Centre is 8.3 acres in size and realistic expectations of future redevelopment applicants should encourage quality development that contributes to the 'heart' of the community rather than discourage redevelopment with unrealistic amenity expectations.

The proposed Master was developed in consultation with the community and City staff and reflects a thorough analysis of land uses, density, urban design guidance, amenities and infrastructure. It promotes a mixed-use environment with residential uses well integrated within the neighbourhood service centre. As in other similar large scale redevelopment and in light of the leasing agreements with the existing tenants on the site, the implementation of the Master Plan is anticipated to occur in phases. The actual implementation dates may vary and are subject to the market condition and other factors which may influence the implementation considerations. As such, it should be noted that the labelling and timing of the future phases (3 to 5) is To Be Determined (TBD).

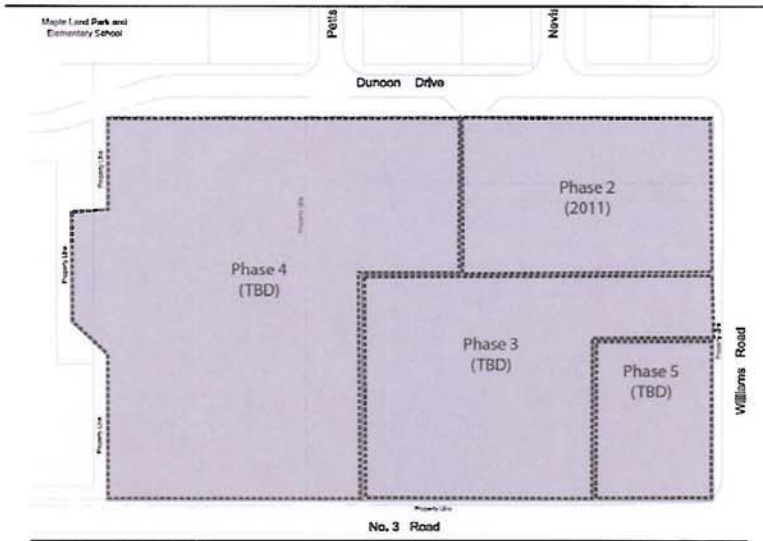
Phase 1 (2010):	Commercial renovation of part of the existing east area of Broadmoor Mall; Development Permit has been issued
Phase 2 (2011):	Commercial-residential redevelopment - northwest corner of site; Rezoning and Development Permit applications have been submitted concurrently with the OCP amendment for the overall Master Plan area
Phase 3 (TBD):	Demolish Phase 1 and build mixed-use development along No. 3 Road between Petro Canada and Richlea Square
Phase 4 (TBD):	Redevelop Richlea Square
Phase 5 (TBD)	Petro Canada site redevelopment

It can be seen that Phases 1 and 2 are expected to be completed within the next two years, while the subsequent phases (3 to 5) are anticipated to occur over a longer time frame (approximately 15- 20 years). The following figure is provided for illustrative purposes only and the Proposed Master Plan as presented below is to be used for conceptual phasing purposes only.

Proposed Phasing by Parcel



Existing Layout



The following chart identifies four development parcels (based on existing private land ownership and phasing) and the relevant residential and commercial development targets, amenities and additional considerations that will be reviewed on future submissions of development applications. The approximate development capacity of each phase is provided below; it should be noted that these values have been considered in the preparation of the Master Plan and are provided for guidance, but that individual redevelopment applications for each parcel may vary slightly. The approximate development capacities are based on a development concept that was developed to help plan the site and are exclusive of parking areas. These areas are provided arbitrarily, as individual site densities and developable areas will be determined in context, when future development applications are received and considered by the City. What is paramount for future redevelopment applications is the ability of the site to remain a commercial hub while integrating residential uses on site; hence the split between commercial (40%) and residential (60%) gross floor area (as identified in the Plan Specifications) will be considered when future redevelopment applications are submitted.

Development Parcel	Approximate Development Capacity	Amenities	Additional Considerations
Phase 2 Commercial Residential Redevelopment -northwest corner of First Capital Realty property	- 66 dwelling units Residential: 6,173 m ² Commercial: 2,093 m ²	- Contribution to Amenity Fund adjusted for Master Plan preparation - Voluntary Contribution and/or provision of onsite Public Art	- Lane Purchase - Green Building features
Phase 3 Mixed use Redevelopment (mid block No. 3 Road) - east area of First Capital Realty property	- 20 dwelling units Residential: 1,944 m ² Commercial: 2,273 m ²	- Contribution to Amenity Fund - Provision of onsite Public Art	- Green Building features - Internal Node/Plaza/Kiosk Privately Owned Publicly Accessible Open space (800 m ²) - N/S Pedestrian Corridor development
Phase 4 Mixed Use Anchor Redevelopment (south and mid block Dunoon) - existing Richlea Square	- 86 dwelling units Residential: 10,210 m ² Commercial: 5,906 m ²	- Contribution to Amenity Fund - Provision of onsite Public Art	- Green Building features - Gateway and Node development (Public Art Opportunity) - Privately Owned Publicly Accessible Open space (800 m ²) - E/W Pedestrian Corridor development - Possible integration of transit shelter on No 3 Road
Phase 5 Mixed use Redevelopment (northeast corner) -existing Petro Canada	- 28 dwelling units Residential: 2,661 m ² Commercial: 1,402 m ²	- Contribution to Amenity Fund - Provision of onsite Public Art	- Green Building features - Gateway and Node development with Public Art opportunity - Possible integration of transit shelter on Williams or No 3 Road - Bike amenities (e.g., compressed air)

Amenities

The following table identifies various mechanisms available to the City to encourage redevelopment of the Broadmoor Neighbourhood Service Centre. The amenity contributions have been defined with input received in consultation with the community and City (as noted in previous sections) and in research undertaken throughout the Master Plan process. Affordable housing contributions are not included in the table below, but future applicants are expected to contribute using the guidelines set out in the City's Affordable Housing Strategy.

Mechanisms	Broadmoor Neighbourhood Service Centre Services and Amenities
Standard Works & Services Agreements	For construction of sewerage, water, and drainage upgrades for roads fronting a development site to service the development
DCC Credits	DCC creditable projects to be confirmed: Upgrades to pedestrian crossings, sewers, other services are reviewed for possible integration into the DCC project list.
Latecomers Agreement	Servicing Study identify requirements for over sizing one pipe segment by 50mm - Cost of pipe over sizing
Community Amenities	The Broadmoor Master Plan has identified a need for community amenities. These will be primarily financed by developers, and include density bonusing and other mechanisms (e.g., service agreements, latecomers charges, phased development agreements).
	Density Bonusing (development above 0.5 FAR) may be allowed where developers meet the following:
	\$1.00/sq.ft: childcare addition to existing facility (South Arm CC or Maple Lane School) Costs to cover 50% of the additional capacity
	\$0.75/sq.ft: Broadmoor Neighbourhood Center Beautification (e.g., public realm, street furniture, plaza, feature landscaping, distinctive pavement)
	\$0.25/ sq.ft: Master Plan planning services
Affordable Housing	As per the Richmond Affordable Housing Strategy
Public Art	Public Art (\$0.60/sq.ft)

In order to allow the Broadmoor Neighbourhood Service Centre redevelopment, sites will require rezoning and development permit applications that consider the following:

Rezoning	Density: 30 UPA MAXIMUM FAR: 1.5 Mixed Use Limited Live/Work
Development Permit	CPTED Universal Design Transportation Demand Management Strategies Green Building Consider exemption(s) from the semi-private outdoor and indoor amenity requirements as a result of community amenity contributions

APPENDICES:

Public Consultation – Open House Information Panels, Newsletter and Survey

WELCOME!

Broadmoor Shopping Centre Master Plan Open House

This Open House marks the launch of the Broadmoor Shopping Centre Master Plan process. First Capital Realty, owner of the Broadmoor Mall, is facilitating this process and the Project Team is here to answer your questions.

The purpose of today's Open House is to:

- Update you on the research our Project Team has undertaken in preparation for the Master Plan launch;
- Share with you a draft vision and guiding principles that will guide the long term redevelopment for the site;
- Introduce two preliminary concept plan options; and
- Gather your feedback on the vision, planning principles and concept options.



We want to know what you think! Please take a moment to fill out a comment form.

Broadmoor Shopping Centre Master Plan Open House

Meet Our Project Team



First Capital Realty is Canada's leading owner, developer and operator of supermarket and drug store anchored neighbourhood and community shopping centres, located predominantly in growing metropolitan areas. We are managed by experienced real estate professionals who have the objective of creating long-term neighbourhood centres. As the owner of its commercial projects, First Capital becomes a member of the community in which we invest. First Capital currently owns interests in 175 properties, and growing, with approximately 19.4 million square feet of gross leasable area. Some of our BC projects

include:

- Terra Nova Shopping Centre, Richmond
- Pemberton Plaza, North Vancouver
- Harbour Front Centre, North Vancouver
- Langley Crossing Shopping Centre, Langley
- West Oaks Shopping Centre, Abbotsford
- Scott 72 Shopping Centre, Delta



Brook + Associates (Brook) is a leading urban planning consulting firm, specializing in complex development projects. Brook has stewarded over 600 projects in 36 jurisdictions over the past two decades and is a well-known firm specializing in policy and development planning and public consultation.



Kasian Architecture Interior Design and Planning Ltd (Kasian) is an integrated team of professionals committed to achieving excellence in design consulting services for our clients. One of the largest integrated design firms in Canada, Kasian has more than 300 team members located in Calgary, Edmonton, Kitchener-Waterloo, Shanghai, Mumbai, Dubai, Toronto, and Vancouver. Kasian has the resources and expertise to deliver planning and design projects effectively and efficiently throughout Canada, and select locations worldwide.



Bunt & Associates Engineering Ltd. is an established Canadian company providing consulting engineering services in Transportation Planning and Engineering. The company's expertise is with the planning, conceptual design, and engineering of mainly urban transportation systems. The range of our experience extends from traffic analysis of road networks to the planning and design of bicycle systems, from airports and university campuses to shopping centres and office developments, and from planning of public transit systems to the design of parking facilities.

The Broadmoor Community

Please place a pin where you live or work.



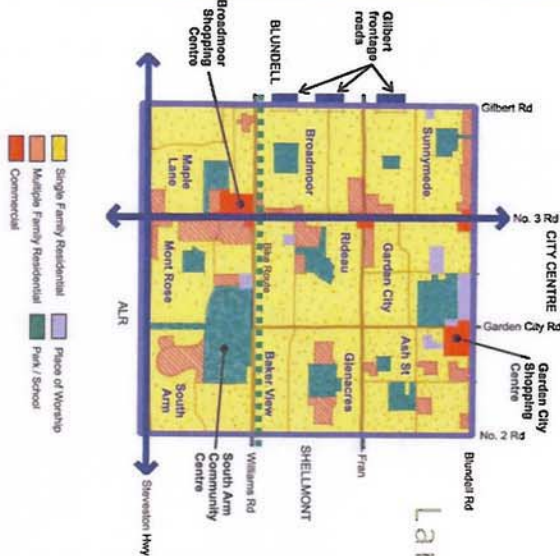
Aerial map of the Broadmoor Community

Location + Land Use Policy



Location

The Broadmoor shopping centre is located at the busy intersection of Williams and No. 3 Road in Richmond, BC. Neighbourhood-serving commercial exists to the south (Richlea Mall) and east (across No. 3 Road). Single-family duplexes and multi-family residential neighbourhoods with parks and schools surround the commercial area.



Land Use Policy

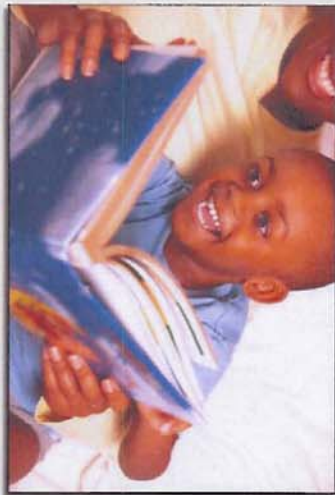


Williams and No. 3 Road is designated as a 'Priority Area' and the Official Community Plan encourages the development of Broadmoor's community "heart". The Broadmoor Shopping Centre redevelopment is envisioned to integrate with the existing scale of the neighbourhood service centre and complement and enhance the community character.

Role of Neighbourhood Centres

Neighbourhood Centres are specific places that:

- Strengthen the 'Heart Of The Community' - where residents can find a wide variety of stores, services, commercial uses, jobs, housing, amenities and public places to meet with neighbours and join in community life.
- Enhance the Quality Of Life – with a wider range of uses and amenities.
- Improve pedestrian and transit oriented uses:
 - reduce dependency on the car (e.g., improve transit, bus, bicycling, walking) and,
 - Improve vehicular access.
- Promote sustainability (e.g., reduce storm water runoff & energy consumption).
- Encourage a greater variety of housing forms and choices.
- Provide community amenities and benefits:
 - Increase built amenities (e.g., child care, community meeting rooms); and
 - Improve parks and trails.
- Allow greater densities than the surrounding single family areas, in order to create more vibrant communities, accommodate limited growth and provide more amenities at no cost to the City.



What is a Master Plan?

The Broadmoor Shopping Centre Master Plan will be a document that provides the City and developers with a planning framework. The Master Plan will reflect community preferences and can be used to assess future redevelopment applications for the Shopping Centre.

A Master Plan provides an overall vision and planning principles to help guide redevelopment of an area. Additional considerations include:

Land Uses - An appropriate mix of residential, commercial and community uses.



Built Form - A variety in building forms, low - mid rise buildings, with a maximum building height defined.



Density - Floor Area Ratio* and opportunities about when bonus density may be achieved.



(*A numeric value that relates the total built floor area to the total parcel area)

Urban Design Guidance - Focus on the public realm including the streetscape, community focal points, and public safety - including flood protection guidance.



Amenities - Gaps in community amenities are identified and opportunities where these could be located are defined (e.g., affordable housing, childcare, parks, plazas).



Infrastructure - Identification of existing and proposed improvements to water, sanitary sewer and storm drainage capacities.



What Guides the Plan?

SITE & NEIGHBOURHOOD LAND USES

- The site is currently home to businesses that offer goods and services, including groceries, restaurants, personal services, banks, and a gas station.
- There are 4 schools (one secondary and three primary) in the neighbourhood.
- Broadmoor is comprised of mostly single family, duplex and townhomes, mid-rise apartment located along arterial roads.
- Close to the site South Arm Park has a number of playing fields, courts, walking trails, residential with community centre and outdoor swimming pool.

TRANSPORTATION

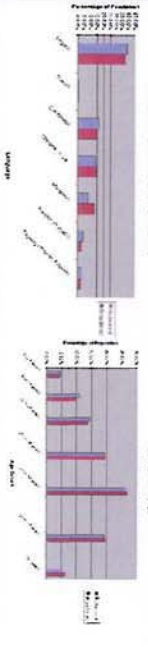
- Important transportation networks exist and additional considerations will be explored.
- Stats Canada data reports that close to 80% of Broadmoor residents use an automobile to get to work.
- Williams Road is a minor arterial with a bike lane and some transit service - the City has noted that this street is in need of more transit service.
- No. 3 Road is a major arterial and transit route.
- Dunmoor Drive is a collector road that provides access to truck deliveries/service use to Richlea Mall.

SUSTAINABILITY

- Considering the social, environmental and economic needs of current and future residents and businesses will be fundamental to the sustainability of the Centre.

COMMUNITY

- Broadmoor is a diverse community.
- Fewer people in Broadmoor have moved in the last five years (compared to Richmond) - suggesting a more stable population base.
- Close to 80% of Broadmoor residents own their dwelling and 20% rent.



Draft Vision & Guiding Principles

VISION: The Broadmoor Shopping Centre is envisioned as a sustainable hub for residents and businesses. People will be able to live, work and meet their daily needs without having to use a car to do so. Public spaces will encourage gathering and accessibility for people.

Guiding Principles

1. A socially and environmentally sustainable neighborhood centre.
2. Reduce the demand for energy and resources.
3. Provide an interconnected circulation network.
4. Encourage the use of alternative modes of transportation.
5. Contribute to a healthy economy.
6. Achieve a compact community.
7. Encourage human scale in form and character.



Guiding Principle

A socially and environmentally sustainable neighbourhood centre.

The Broadmoor Shopping Centre will provide for interaction and low-impact development strategies to support social and environmental sustainability objectives and promote a sense of community/belonging.

Healthy Places & Socially Integrated

- Diversify the neighbourhood centre by encouraging a mix of uses in the centre and/or in a building.
- Create a vibrant commercial and a mixed use centre by allowing more dense development.
- Integrate commercial uses such as cafés and restaurants, to create important social spaces and street life that enhance social gathering opportunities.
- Encourage a mix of housing types including market condominiums, smaller sized affordable units, and family oriented apartments.



- Encourage on-site daycare in new mixed use or residential buildings.
- Provide the opportunity for a healthcare component to be integrated on site (e.g., Doctor's office, pharmacy).
- Create publicly accessible indoor and outdoor spaces, such as landscape nodes, outdoor green space, plazas, path linkages and indoor meeting space, for residents and visitors.
- Integrate Crime Prevention through Environmental Design principles into the site design to ensure a safer neighbourhood.
- Ensure minimum universal accessibility standards to allow people to access the Broadmoor Shopping Centre and to age in place.

Guiding Principle

A socially and environmentally sustainable neighbourhood centre (cont'd)

Low Impact Development Environmental Design

Water

- Integrate water conservation measures in site and building design to reduce indoor water consumption. (e.g., water meters, low flow toilets and fixtures, rain capture for irrigation).
- Reduce irrigation needs by using plants that require little or no water.

Landscaping

- Preserve and enhance natural habitat pockets by using native planting species where possible that mimic local habitat.
- Minimize heat island effect in parking lots by planting shade trees.
- Plant podium roofs with gardens and natural habitat.
- Use natural pest control methods to discourage over fertilization of planted areas.



Stormwater

- Manage stormwater quality and quantity to lessen the impact on the City's system.
- Mark all sewer grates with reminder "Leads to fish habitat".
- Maximize permeable ground to reduce runoff and increase infiltration.
- Use bio-swales for treatment of parking lot stormwater runoff.



Guiding Principle

Reduce the demand for energy and resources by using green building strategies.

The Broadmoor Shopping Centre will incorporate a wide range of green building features that support community and regional sustainability objectives. Green Building Strategies will incorporate LEED principles and new construction will target a LEED Silver equivalency.

Energy

- Promote the development of a neighbourhood centre district heating system or micro-utility if feasible.
- Design all buildings to take advantage of passive solar design including: building self-shading, external solar shading devices, and high-efficiency windows
- Promote natural ventilation in building design.
- Encourage the use of solar photovoltaics, solar hot-water heating, wind power, geo-exchange heating and cooling.
- Ensure optimal wall to window ration in buildings to reduce energy requirements.
- Design all buildings to take advantage of high thermal mass, super-insulated walls, radiant heating & cooling, and heat recovery ventilators

What is Leadership in Energy and Environmental Design (LEED)?

LEED is a third party certification program that promotes a whole building approach to sustainability. Five key areas of human and environmental health are used to define various criteria to achieve a more sustainable built form. Visit www.usgbc.org for more information.

Education

- Provide programmable thermostats for all commercial and residential units and ensure individual metering for all utilities.
- Have a commissioning agent on all projects to ensure systems (building envelope, mechanical) are working efficiently.

Materials

- Enhance healthy indoor air quality by using adhesives, sealants, paint, and floor coverings with low emission ratings.
- Encourage use of recycled, recyclable and/or, regionally sourced building materials and certified wood products.
- Use effective construction and permanent waste diversion strategies to reduce the load on local landfills (e.g., recycling collection and provision for future organics collection).

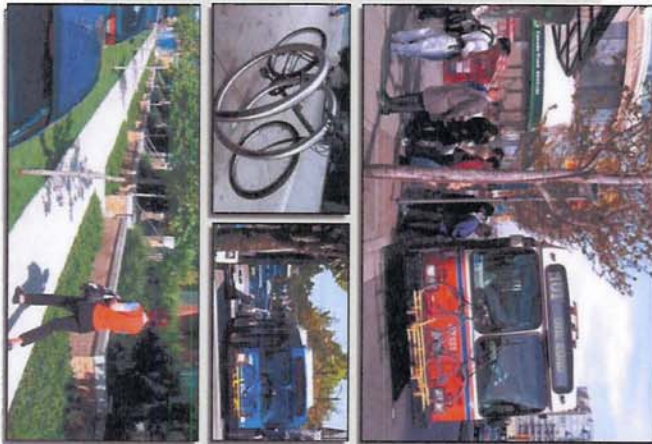


Guiding Principle

Provide an interconnected circulation network

The current transportation conditions have been carefully examined. An environmentally and community-friendly interconnected circulation network will be fundamental to the Broadmoor Shopping Centre. Improved connectivity and reduced distances between homes, work and shopping will encourage less reliance on private automobiles.

- Create a hierarchy of access routes and pathways to accommodate a variety of transportation modes.
- Improve the connectivity of the Centre to the broader community by providing direct linkages to Maple Lane Park, Dunoon Drive, No. 3 Road and Williams.
- Ensure vehicle access is direct and intuitive to the site.
- Encourage 'green' links both within the site and to the adjacent neighbourhood.
- Provide an enhanced connection from No. 3 Road to Maple Lane Elementary School complete with fitness path.
- Allow temporary truck access from Dunoon Drive to encourage the future redevelopment of the centre.
- Encourage long-term truck access from arterials.
- Ensure universal access throughout the site (e.g., curb cuts and level entryways).
- Improve connectivity of the site for transit and bicycle routes through appropriate design.



Guiding Principle

Encourage the use of alternative modes of transportation

What is Transportation Demand Management (TDM)?
A: Management and design principles that provide for a range of transportation options as an alternative to the private vehicle.



Transportation Demand Management Strategies that result in more innovative and efficient use of transportation resources typically include:

- Encourage pedestrian-oriented and bicycle friendly design to support active lifestyles and provide residents with alternatives to the private automobile.
- Encourage streetscape improvements that create more accessible, efficient and livable urban street design.
- Encourage shared transportation infrastructure for the neighbourhood by providing car share parking spaces (e.g., Cooperative Auto Network or Zip-car).
- Incorporate strategies for reduced or more efficient parking requirements to minimize parking infrastructure costs and provide an incentive for people to use alternative modes of transportation (e.g., shared use of parking).
- Encourage the provision of frequent transit by locating higher density development along transportation corridors.
- Increase options for bicycle transport on site and within buildings by integrating bicycle racks, lockers, changing facilities, bike maintenance (air/water).
- Provide the infrastructure for alternative fuels (e.g., metered electrical plug-ins for electric cars).

Guiding Principle

Contribute to a healthy economy

An important component of a healthy community is the establishment of a robust economy over the long term. The proposed Broadmoor Shopping Centre redevelopment will play an important role in contributing to a healthy local economy.



Key Economic Strategies:

- Provide opportunities for a range of both permanent and temporary jobs in a variety of retail, office, construction and other commercial service businesses.
- Support neighbourhood daily needs by providing a mix of stores and services in a variety of store sizes.
- Encourage the development of live/work units.
- Support the prosperity of commercial areas by integrating local residents (and possible customers) into the Centre.
- Provide a range of dwelling unit sizes, including those that address the needs of local service workers in the community.
- Discourage the development of large big box stores that could reduce the feasibility of smaller retailers
- Encourage the use of construction materials and development services from local suppliers and trades.
- Reduce site servicing costs and long term infrastructure maintenance by encouraging compact development.

Guiding Principle

Achieve a compact community

The Broadmoor Shopping Centre development will contribute to creating a complete community.

Compact Mixed Use Development

- Utilize developable land more efficiently, rather than creating a dispersed pattern of low density urban sprawl, by encouraging infill development at this location.
- Create of a vibrant, mixed use, residential and commercial development.
- Increase density along transportation corridor, making the existing neighbourhood more viable and prosperous.
- Offer a range of unit sizes for different household types and incomes
- Provide opportunities for local residents to walk to a range of amenities and services, such as shops, employment and recreation.
- Reduce the need to use the private automobile for daily needs.
- Integrate strategies that improve personal safety and security, such as improved lighting and eyes on the street

Example Projects: Metro Vancouver leads the way when it comes to successful, mixed-use developments. Here are two prominent examples:

Newport Village

- Bosa Development Corporation
- Mixed-use development
- High-rise and low-rise residential
- Commercial (retail/office/institutional) uses
- Well served by transit
- Unique mix of retail shops and services
- Underground and surface parking
- Curvilinear development



Arbutus Village

- Variety of development
- Mixed-use development
- High-rise and low-rise residential
- Commercial (retail/office/institutional) uses
- Well served by transit
- Unique mix of retail shops and services
- Underground and surface parking



Guiding Principle

Encourage human scale for the form and character of the Centre

- Favour pedestrians over cars in site planning and design.
- Elevate pedestrians slightly above cars and promote above ground structured parking that is integrated into building design to get cars off the pedestrian plane.
- Provide pedestrian weather protection.
- Provide outdoor lighting for pedestrians and not just parking lots.
- Provide benches at gathering areas and along walking routes.
- Provide public art that people can interact with.
- Divide large parking lots into smaller areas using landscaping beds to promote human scale.
- Promote the inclusion in the overall design of rooftop gardens complete with views.
- Preserve and ensure people's daylight rights.



Land Use Concept 1

People will be able to live, work and meet their daily needs without having to use a car to do so. Public spaces will encourage gathering and accessibility for all people.

Key Elements

Key elements of the plan are designed to:

- Revitalize the existing shopping area and provide additional shopping options
- Pedestrian improvements to the streetscape both internally and to the surrounding site and numerous green connections through the site.
- Enhance the economic viability of the mall and individual tenants
- Provide additional housing options in the Broadmoor community
- Residential interface integrates with adjacent Dunoon and Maple Village residential areas.
- Residential densities increase as approach No. 3 Road and Williams
- Most commercial uses oriented internal to the Centre to create an intimate shopping experience.
- Centralized larger community space to meet additional residential need with adjacent pocket park and green connections.
- Direct linkage with Maple Lane neighbourhood park.
- Primary access to the site off Williams and No. 3 Road - secondary accesses for service and residential uses.



Land Use Concept 2

People will be able to live, work and meet their daily needs without having to use a car to do so. Public spaces will encourage gathering and accessibility for all people.

Key Elements

- Key elements of the plan are designed to:
- Revitalize the existing shopping area and provide additional shopping options.
 - Enhance the economic viability of the mall and individual tenants.
 - Highest residential uses located at corner of No 3 Road and Williams.
 - Lower residential density integrates with adjacent Dunroon residential.
 - Majority of land remains commercial.
 - Green pocket park centralized.
 - Less community space as in less demand with lower residential densities.
 - Community space is located close to residential uses.
 - Green connections surround the Centre whereas vehicle access is internalized.



Thank you !

Thank you for participating in tonight's Open House!

First Capital Realty and the Project Team appreciate your participation in the Broadmoor Shopping Centre Master Plan process. Please take a moment to provide detailed comments and feedback on the comment forms provided.

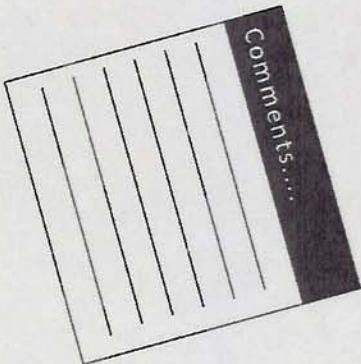
Next Steps

The Project Team and First Capital Realty will consider the community's comments carefully and submit a Public Consultation Report to the City for review. Next steps include:

- Submission of a Public Consultation Report to the City
- Present the Master Plan to the City of Richmond Planning Committee

Planning + Public Consultation Process

- October 2009** - Summarize Survey and Public Open House feedback
- Fall 2009** - City of Richmond Staff Report About the Master Plan- Planning Committee Meeting
- Fall 2009** - Council Approval of the Master Plan
- Fall/Winter 2010** - Rezoning and Development Permit Applications



If at any time you wish to find out more about the application – please contact:
Brook + Associates t. (604) 731-9053 f. (604) 731-9075

Broadmoor Redevelopment Update

Volume 1 - Summer 2009

Broadmoor Shopping Centre Master Plan

Last May, First Capital Realty (FCR) approached the City to redevelop their property at Broadmoor Shopping Centre. The City advised First Capital to undertake a planning process and prepare a Master Plan for the entire shopping centre site and involve the three property owners within the shopping mall complex: Broadmoor Mall (owned by FCR), Richlea Mall (Safeway and other businesses) and Petro Canada. The master plan process will help define a long term vision and will be used as a guide for the Centre's long-term redevelopment.

This fall will mark the launch of the Master Plan process by First Capital Realty. At public open houses, through newsletters and surveys such as this one, First Capital will be engaging the business owners and nearby Broadmoor residents to define a long term vision for the Shopping Centre. The community will have input into the overall vision, character, housing forms and concepts.



What is a Neighbourhood Centre?

Neighbourhood centres are places within a community that serve as its 'heart' – where local residents can find a wide variety of stores, services, amenities and public places to meet their every day needs. It's a place to meet with neighbours, do their shopping, have a coffee and join in community life – all within walking distance of most residents in the area. There is generally an appropriate concentration of higher density housing, parks and amenities near the centres. Depending on a number of factors, development may take 10 to 30 years to be completed.

The Broadmoor Shopping Centre is defined in Richmond's Official Community Plan as a Neighbourhood Service Center and the 'heart' of the Broadmoor community

Look Inside!

IMPORTANT SURVEY ENCLOSED!

To help us better understand your concerns and to hear about your ideas, please complete the enclosed survey and

- fax or mail it back to us (see reverse cover for details) OR
- complete the survey and send via e-mail to bchisholm@brookdev.com OR
- you can **drop it off** at our open house on **September 29, 2009**

Access the survey online:

www.brookdev.com/resources/public_consultation/
User Name: brook
Password: dev

Broodmoor Mall Renovation & Open House Summary

First Capital Realty hosted an open house last January to solicit the community's feedback on their renovation plans. It was a big success with more than 80 per cent of attendees supporting FCR's Broadmoor Mall proposal. More than 150 community members learned about the renovation plans for the Mall and provided feedback about the proposal. Many viewed the proposal as an opportunity to bring more retail options and vitality back to the area and this information will inform the Master Plan process.

Renovation Update

City Council endorsed First Capital Realty's Broadmoor Mall renovation development permit application at the July 27th Council meeting. The Development Permit is for the southeast portion of the Mall (Phase 1) and includes pedestrian improvements, a new facade and additional landscaping. The Broadmoor Mall renovation is an important immediate investment in the Broadmoor Shopping Centre area. A big thank you to the community for supporting FCR's first phase of their revitalization plans!

For more information about the proposed renovation, please visit our website for project images and the City of Richmond staff report.

http://brookdev.com/resources/public_consultation/

What we Heard:

- the need for enhanced accessibility and parking layout
- the opportunity to integrate gathering places that would help bring people to the area
- to ensure that the Mall would feel safe and have an updated design



PHASE 1

Maple Lane Elementary School Playground Grows!

Throughout our ongoing consultation with the community, we heard that the Maple Lane Elementary School was looking to upgrade their school ground with new play equipment for the neighbourhood.



The Maple Lane school ground is the closest park to the Mall and provides recreation and play spaces for the entire neighbourhood. First Capital Realty supported the playground expansion by donating \$50,000 to purchase new playground equipment. The new equipment will provide hours of recreational entertainment for students and neighbourhood children. Students reviewed and voted on

new playground equipment in June and we expect to hear about the winning selection this Fall.



Broadmoor Shopping Centre Master Plan Neighbourhood Survey

The Broadmoor Shopping Centre at Williams and No. 3 Road is designated a Neighbourhood Service Centre - and considered the 'Heart of the Community'. The Master Plan process will help define vision and be used as a guide for the Centre's long term redevelopment. Please take a few minutes to fill out the survey below.

位於 Williams 街與 3 號路交界的 Broadmoor 商場被劃定為鄰里服務中心，是「社區的心臟地帶」。在這個秋季，First Capital Realty 房地產公司將會開展總體規劃進程 (Master Plan Process)，透過開放日、定期通訊和像這次一樣的調查，讓 Broadmoor 社區充份參與，共同訂立遠景，作為 Broadmoor 商場長遠發展的依據。假如閣下喜歡用廣東話或國語/普通話來完成調查，請聯絡中僑互助會翻譯部，要求 Broadmoor 項目翻譯服務(電話:604-408-7274 內線 2044)。同時，請蒞臨參加 9 月 29 日下午 4 時至 7 時在 Broadmoor 商場舉行的開放日。

1. Please indicate your interest(s) in the Broadmoor Shopping Centre Master Plan process:

- Resident of the Broadmoor Area
- Land owner in the Broadmoor Area
- Business owner in the Broadmoor Area
- Business owner at the Broadmoor Shopping Centre
- Work in the Broadmoor Area
- Other. Please define: _____

2. What do you like most about the Broadmoor Shopping Centre (e.g., range of shopping options, close to home, access to transit)?

3. What type of stores/services would you like to see (e.g., beauty salon, photo finishing, other retail, restaurants, bookstore)?

4. What are your top three issues with the Broadmoor Shopping Centre (e.g., accessibility, services, etc.)?

5. What are your top 3 suggestions for improving the Broadmoor Neighbourhood Service Centre?

6. What types of uses could you see integrated into the Shopping Centre. Please check all that apply:

- Office, please specify _____
- Retail, please specify _____
- Mixed-use (e.g., commercial at grade with apartments/condos above)
- Low-rise apartments/condos (e.g., four-storeys)
- Mid-rise apartments/condos (e.g., greater than 4 storeys)
- Townhouses
- Other Please specify: _____

7. Are there any transportation improvements you feel would benefit the Broadmoor Shopping Centre (e.g., mid-block crossing, bike paths, better transit service, etc.)?

8. What community amenity improvements do you feel would benefit the Broadmoor Centre (e.g., child care space, library, community centre space, arts and culture space, seniors programs, etc.)?

9. What is your long-term vision for the Broadmoor Neighbourhood Service Centre?



Broadmoor Shopping Centre Master Plan

Open House

Come to the Open House on September 29, 2009

Join First Capital Realty at the Broadmoor Mall
(look for signage around the Mall to direct you to the Open House).
At the Open House we will unveil a draft vision of the master plan, planning principles, and introduce some preliminary concept plan options.

We want your feedback and look forward to sharing ideas.

What: Broadmoor Shopping Centre Master Plan Open House
When: September 29, 2009 between 4:00 PM – 7:00 PM
Where: Broadmoor Mall

What's Next?

- Community completion of survey.
- September 29 Public Open House.
- Feedback from the Survey and Open House will be analyzed and integrated into the Master Plan.
- The Master Plan options will be refined and the draft vision and guiding principles revised.
- Master Plan update to the City's Planning Committee and review by Council.

Keep Up to Date

If you have any questions, ideas or concerns, please feel free to contact:

Blaire Chisholm, Brook + Associates

Tel: 604-731-9053 x104

Mail: #410-535 Thurlow Street, Vancouver, BC V6E 3L2

Fax: 604-731-9075

E-mail: bchisholm@brookdev.com

Visit our website

We have created a web page where project information, drawings, news and events will be posted.

www.brookdev.com/resources/public_consultation/

User Name: brook

Password: dev



APPENDICES:

Transportation Analysis & TDM Supporting Materials

Parking

The analysis for commercial and residential parking has been combined to reflect the mixed use effect of the Master Plan area. The following table provides a summary of the parking supply/requirement balance to highlight the anticipated conditions.

Combined Parking Requirement/Supply Balance

	2011 (Phase 2)		2024 (Phase 3)		2027 (Phase 4)		2031+ (Phase 5)	
	Required	Provided	Required	Provided	Required	Provided	Required	Provided
Commercial	425	418	384	403	382	323	422	323
Residential	96 ⁽¹⁾	75	126 ⁽¹⁾	125	239 ⁽¹⁾	218	281 ⁽¹⁾	262
Total	521	493	510	528	621	541	703	585
% Bylaw Requirement		95%		104%		87%		83%

Note: (1) Exclude the 0.2 stall per unit for visitor parking for shared parking

Bicycle Parking Spaces Required

Use	Size	Zoning Bylaw Rates	
		Class 1	Class 2
Retail Trade & Services; Food Catering Establishment		0.27 spaces per each 100 m ² (1,076 ft ²) of gross leasable floor area greater than 100 m ² (1,076 ft ²)	0.4 spaces per each 100 m ² (1,076 ft ²) of gross leasable floor area greater than 100 m ² (1,076 ft ²)
Residential		1.25 spaces per dwelling unit	0.2 spaces per dwelling unit

		Use	# Bicycle Spaces	
Requirement at each phase	Phase 2	Commercial	6	8
		Residential	80	13
	Phase 3	Commercial	6	8
		Residential	25	4
	Phase 4	Commercial	15	22
		Residential	94	15
	Phase 5	Commercial	4	5
		Residential	35	6
		COM: 31	RES:234	COM:43 RES:38

Commercial Loading Requirements

Phase	Floor Area m ² GLA	Bylaw Requirements			# Spaces Shown in Master Plan
		Medium Size Spaces	Large Size Spaces	Minimum # Spaces	
2	2,071	On-site designated: 1 space, plus 1 space for each additional 5,000m ² over 1,860m ²	On-site designated: 1 space for each 5,000m ² over 1,860m ²	2 medium size	1 medium size
3	2,053			2 medium size	1 medium size
4	1,028	On-site designated: 1 space	N/A	1 medium size	1 medium size
4	4,486	On-site designated: 1 space, plus 1 space for each additional 5,000m ² over 1,860m ²	On-site designated: 1 space for each 5,000m ² over 1,860m ²	2 medium size	1 medium size; 1 large size
5	1,262	On-site designated: 1 space	N/A	1 medium size	1 medium size

Residential Parking and Car-Sharing

Overview of Parking Standards for Urban Centres

Understanding the parking standard approaches adopted in other cities and municipalities for compact pedestrian-/transit-orientated communities provides the basis for assessing the requirement for Broadmoor. Parking standards for multi-family units are presented for a selected number of municipalities and cities within Metro Vancouver

Parking Standards for Urban Centres

City	Bylaw Parking Rate (absolute minimums)
Burnaby P11e (UniverCity at SFU)	1 stall per unit for 1-bedroom unit + 0.1 stall for each additional bedroom; visitor parking 0.1 stall per unit
City of Vancouver (Non-downtown)	0.5 stall per unit up to 50 m ² ; and after that 0.6 stall per unit + A / 200 m ² GFA up to a maximum of 1.5 stalls per unit; inclusive of visitor parking
City of New Westminster (under review)	1.0 – 2.0 stalls per unit; including visitors (relaxations allowed)
City of North Vancouver	1.2 stalls per unit; inclusive of 0.2 for visitors

Evidently, parking rates in these municipalities are starting to approach the 1 stall per unit level. Also, New Westminster is currently reviewing their parking by-law and in the interim they are accepting relaxations at around 1.2 stalls per unit in certain locations (inclusive of visitor parking).

Car-Sharing Schemes

Car-Sharing Schemes are also becoming more popular and put in use more often. The following examines the planning context in North America for incorporating car-sharing schemes within bylaws for new developments. This table summarizes the cities where car-sharing schemes are established or where the city has or is planning to amend their planning code to encourage participation in such schemes.

Parking Status for Developments with Car-Sharing Schemes

Location	Planning Status
Arlington County, VA	Parking reductions are negotiated as part of the overall TDM package. Arlington prefers credits for tenants instead of dedicating car-sharing vehicles, and this allows vehicles to be located on-street or in other 'communal' off-street parking locations.
Austin, TX	The proposed code amendment recommends that 1 car-sharing vehicle be allowed to replace 20 parking spaces for projects with at least 100 residential units.
Vancouver, BC	The City allows a reduction of three parking spaces per car-sharing vehicle (net reduction of 2) for every 60 units. The vehicle must be provided by the developer and is subject to the filing of a satisfactory agreement between the developer and the car-sharing operator.
San Francisco, CA	Permits 1 car-sharing vehicle to be provided for every 200 units with parking reductions determined on a case-by-case basis.
Seattle, WA	The City has no specific standards for parking space reduction through the introduction of car-sharing vehicles. This is due, in part, to the City having low parking standards.
Portland, OR	As Seattle

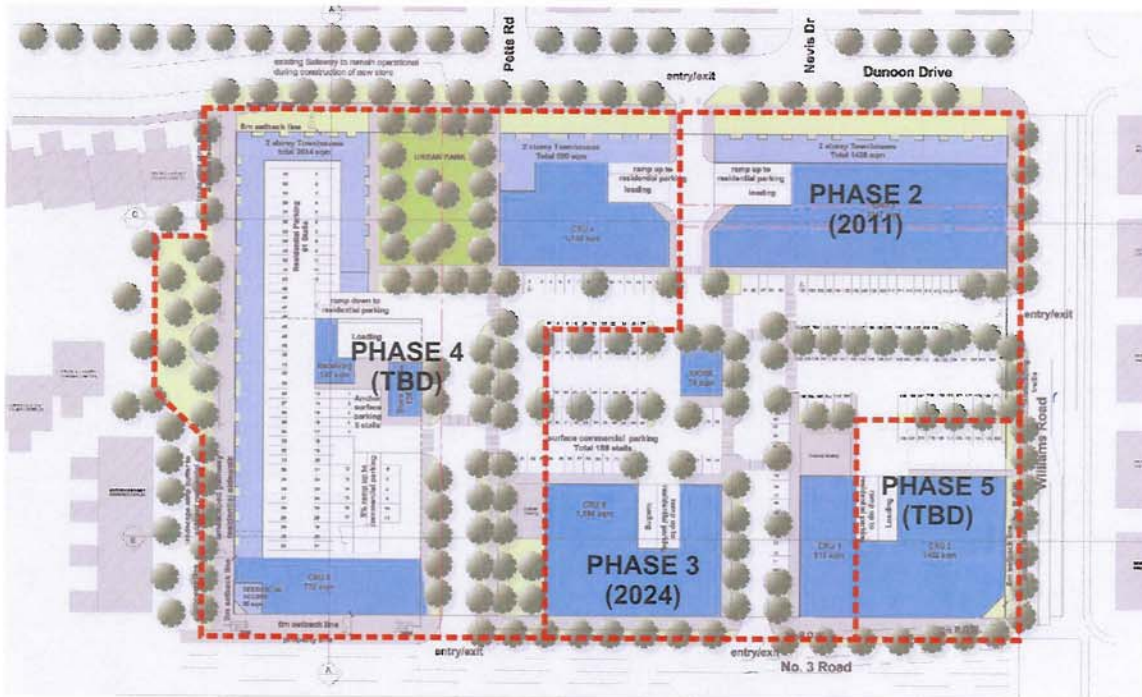
The proposal for the Broadmoor Neighbourhood Service Centre allows 1 car share vehicle located in a publicly accessible location. As the other parcels redevelop, the number of car share stalls should be re-evaluated to encourage additional participation in a car share scheme.



Existing Layout



Proposed Master Plan



N.T.S. 4493-14



**Broadmoor Shopping Centre Master Plan
Richmond, BC**

**Transportation Study
Final Report**

Prepared For: First Capital Realty Inc.

Prepared By: Bunt & Associates Engineering (B.C.) Ltd.

File Number: 4493.14

Date of Issue: January 14, 2010

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1.0 INTRODUCTION

1.1 Background

First Capital Realty Inc. is planning to redevelop the Broadmoor Mall located at the south-west corner of the intersection of No. 3 Road and Williams Road in the City of Richmond, BC. This neighbourhood shopping centre has been serving the community for many years, but revitalization is much needed in order to maintain its competitiveness and to better serve the community. The site is categorized as one of the *Neighbourhood Service Centres* in Richmond's Official Community Plan (OCP) and in the *Priority Area* where improvements are encouraged to provide distinctive design features in the road network to complement neighbourhood character and to emphasize landmark locations. The redevelopment proposals will provide an excellent opportunity and fully supports the OCP's planning and policy objectives.

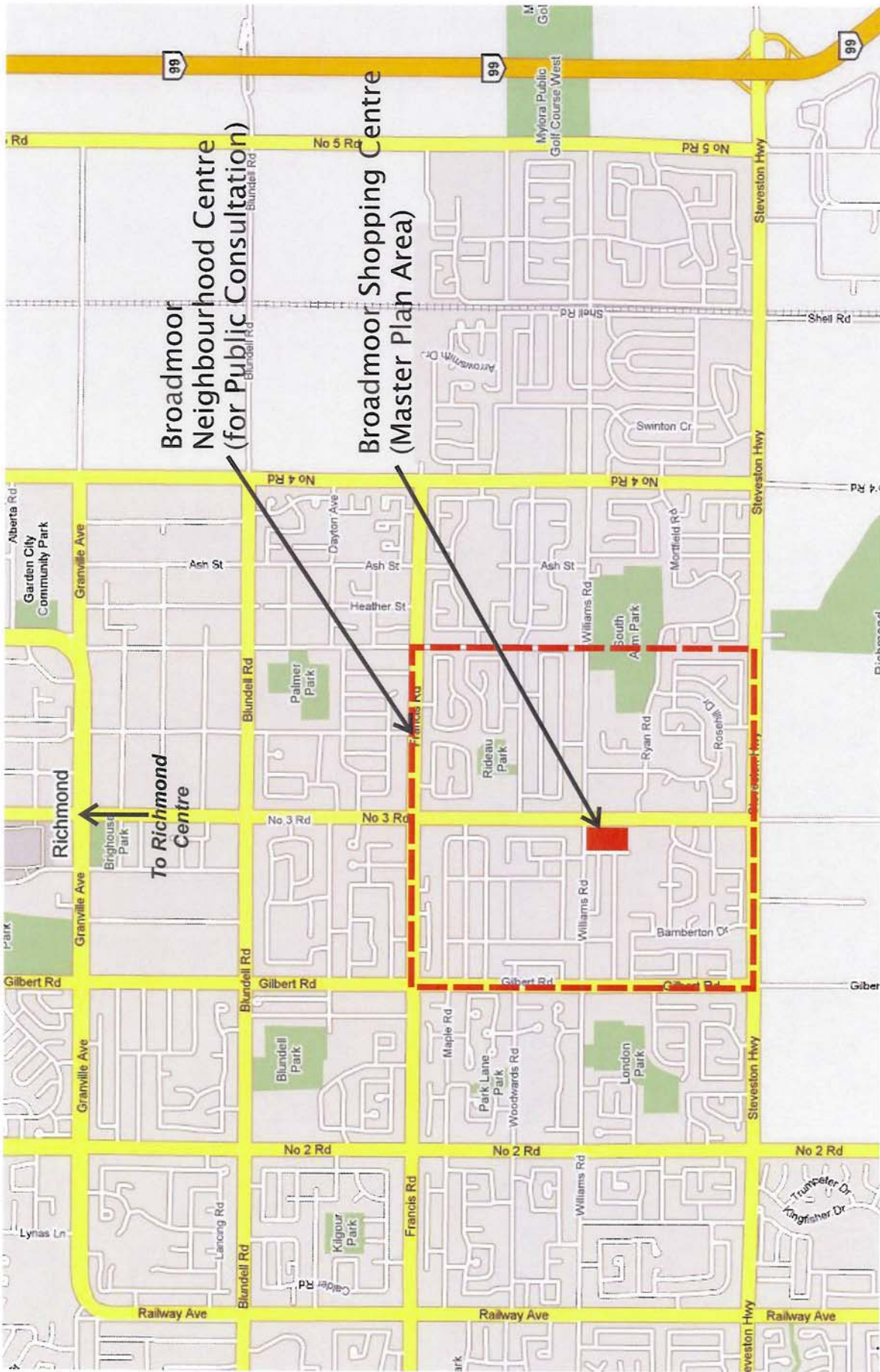
Extensive planning studies for the Broadmoor Mall have been conducted including submission of development permit applications, liaisons with city staff, and public consultation/open houses. Detailed traffic impact studies were first undertaken by Bunt & Associates in 2007.

In early 2009, Richmond's Planning staff advised that a Master Plan is required for the proposed redevelopment in order to provide an overall planning framework which reflects community preferences and guides the implementation process during the various phases. The Terms of Reference for the Master Plan (called *Broadmoor Shopping Centre Master Plan*) was subsequently established. The required Master Plan area includes the Broadmoor Mall site owned by First Capital Realty Inc. as well as the adjoining properties owned by others such as Richlea Square and the Petro Canada gas station, see **Exhibit 1.1**. A larger area called *Broadmoor Neighbourhood Centre* was defined to reflect largely for public consultation.

1.2 Study Objectives

To support the master planning process, Bunt & Associates conducted a Transportation Study and reviewed the transportation aspects related to the proposed Master Plan. The findings and recommendations from the Transportation Study are presented in this report.

The development proposals in the Master Plan are anticipated to be developed in phases over the next 20-30 years, or longer. Phase 1 of the redevelopment is to renovate part of the existing Broadmoor Mall (eastern half) where a Development Permit has been issued. This phase will include improvement to both interior and exterior, but generally no change to the building footprint. Works will commence shortly. First Capital also proposes to redevelop the remaining half of the Broadmoor Mall (western half near Williams Road and Dunoon Drive as Phase 2) into a mixed-use development to be completed by 2011. Concurrently with the Rezoning Application for the entire Master Plan, a separate Development Permit Application was submitted to the City for the initial Phase 2 development and a separate Traffic Impact Study Report has been prepared by Bunt & Associates.



**Broadmoor Neighbourhood Centre
(for Public Consultation)**

**Broadmoor Shopping Centre
(Master Plan Area)**

Richmond
To Richmond Centre

Dec 2009 N.T.S. 4493-14

Site Location

Broadmoor MP Transportation Study, Richmond, BC

Exhibit

1.1

1.3 Structure of Report

Following this introductory section, **Sections 2 to 6** cover the transportation analysis and evaluation of the Master Plan, including

- A description of the proposed Master Plan and land uses;
- An assessment of the existing condition in the surrounding area;
- Development traffic impact assessment of the Master Plan during the various phases and final build-out, and identification of the required off-site improvements;
- Review of on-site circulation and provisions for pedestrians, bicycles, loading and parking for various phases and final build-out;
- Assessment of the transportation demand management (TDM) principles and measures to support the overall planning and sustainability objectives envisaged in the Official Community Plan.

Finally, conclusions of the Transportation Study are provided in **Section 7**.

2.0 MASTER PLAN AREA AND DEVELOPMENT PROPOSALS

2.1 Existing Land Uses

The Master Plan site area is approximately 33,600m² (140m x 240m) and is currently comprised of 6 land parcels with four property owners, as illustrated in **Exhibit 2.1** and **Table 2.1** below.

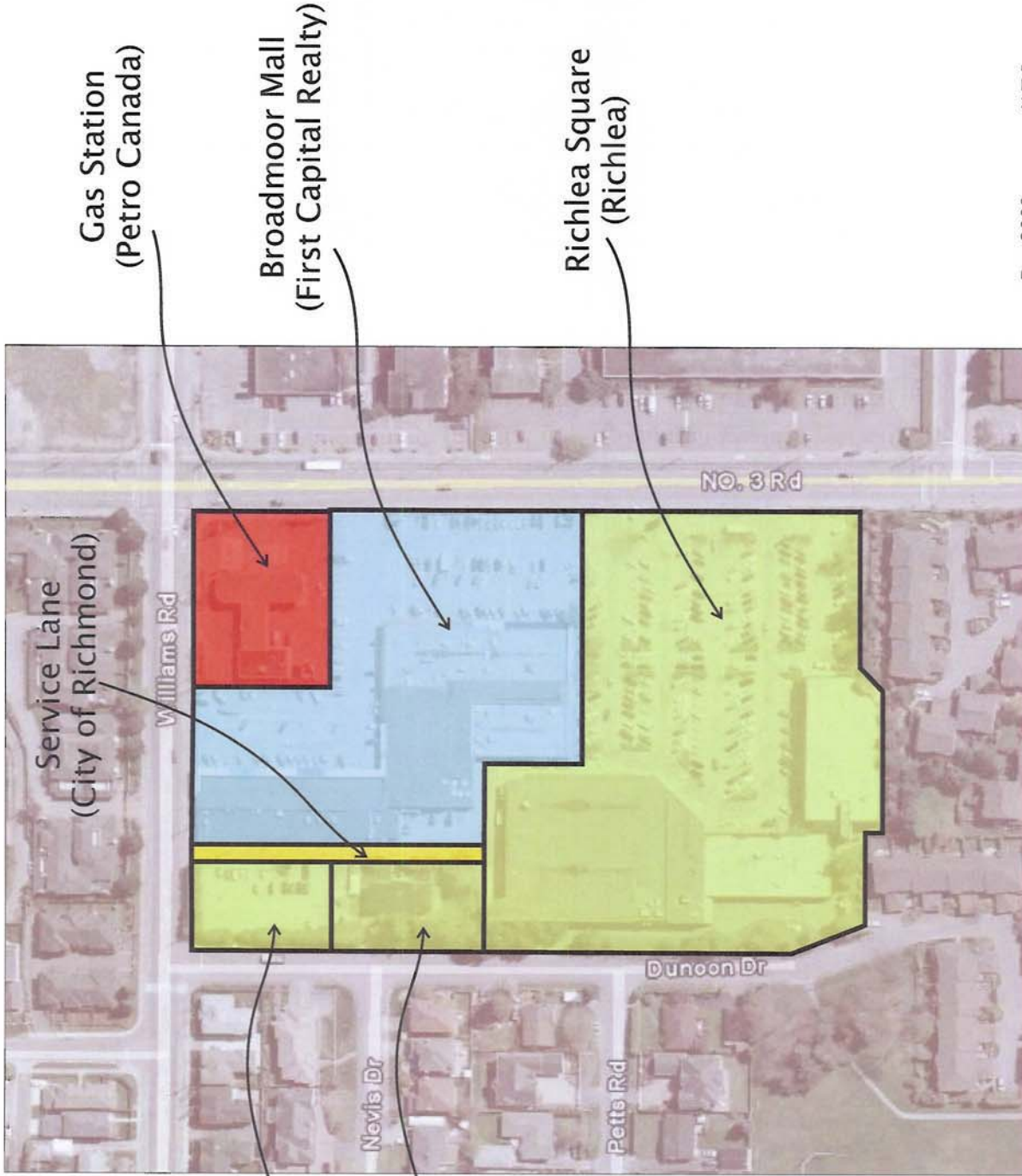
Table 2.1: Summary of Existing Land Uses

Parcel	Property Owner	Site Area (m ²)	Uses
Broadmoor Mall	First Capital Realty	11,269	2 Banks Pub and Liquor Retail 4 Restaurants/Fast Food Dry Cleaner Tailor Barber Grocery (Bakery, Fruits/Veg) Pet Retail Mobility Retailer
Richlea Square	Richlea	16,929	Safeway 4 Restaurants/Cafes Bank Insurance Broker 3 Dental Clinics 2 Medical Clinics Pharmacy Dry Cleaner 2 Estheticians Travel Agent Animal Clinic Other retail (House of Cards, Blockbuster)
Petro Canada	Petro Canada	2,490	Gas Station Convenience Store
Residential Lot	First Capital Realty	1,202	Vacant Residential Building
Parking Lot	First Capital Realty	1,113	Parking Lot
Lane	City of Richmond	541.5	Service Lane

The splits of property ownership by site area are as follows:

- First Capital Realty 40.5%
- Richlea 50.5%
- Petro Canada 7.4%
- City of Richmond 1.6%

First Capital Realty currently owns approximately 40% of the Master Plan area. In preparing the Master Plan, Brook + Associates, planning consultants for the project, liaises with all 4 property owners to ensure that the plan reflects a coordinated effort.



Gas Station
(Petro Canada)

Broadmoor Mall
(First Capital Realty)

Richlea Square
(Richlea)

Service Lane
(City of Richmond)

Parking Lot
(First Capital Realty)

Vacant Residential
Building
(First Capital Realty)

Dec 2009 N.T.S. 4493-14

Land Parcels and Ownership

Broadmoor MP Transportation Study, Richmond, BC

Exhibit

2.1

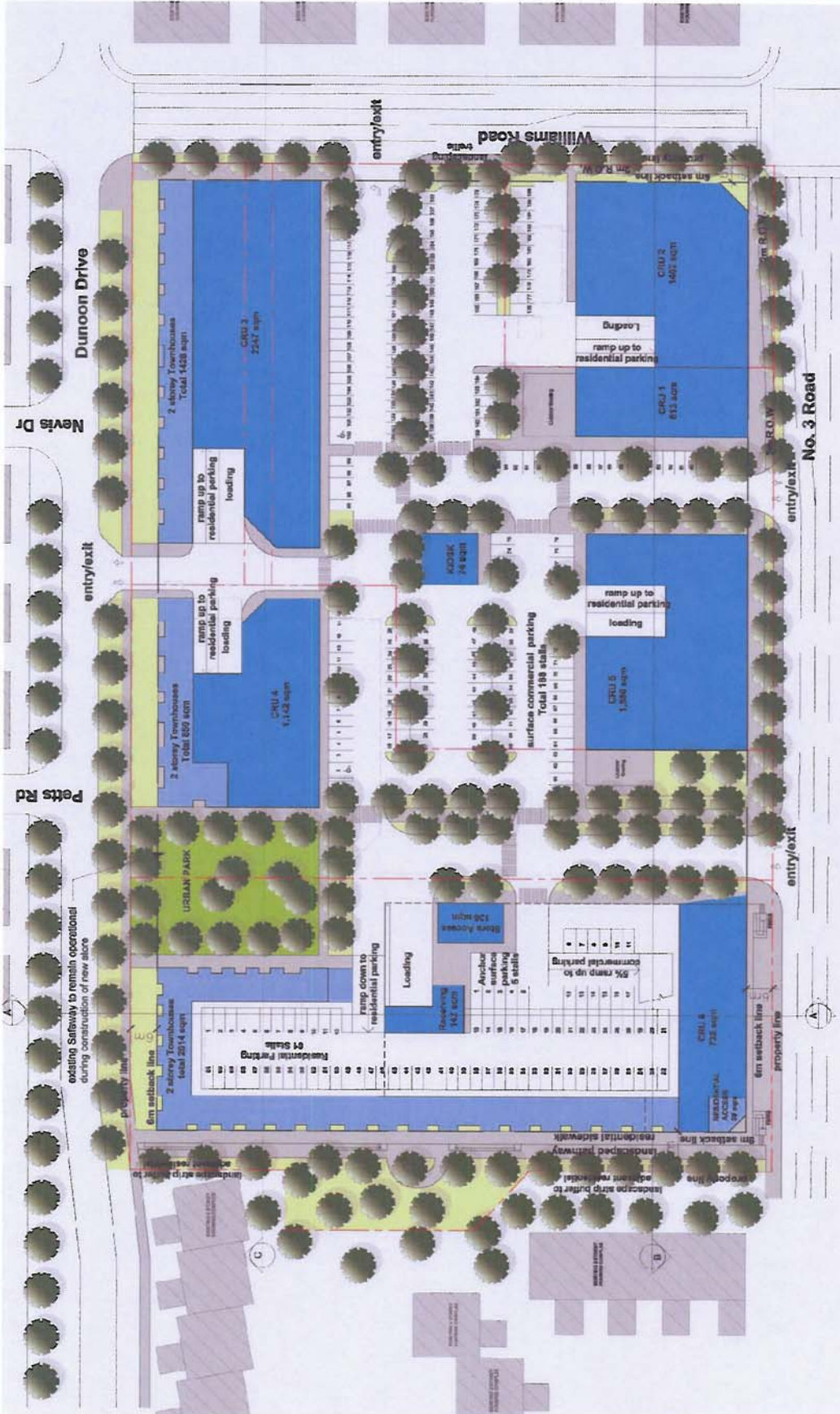
2.2 Proposed Master Plan and Phasing

The proposed Master was developed in consultation with city staff as illustrated in **Exhibit 2.2**. The Master Plan reflects a thorough analysis of land uses, built form, density, urban design guidance, amenities and infrastructure. It promotes a mixed-use environment with residential use well integrated within the neighbourhood shopping centre. The primary objectives of the Master Plan are (i) to demonstrate that a satisfactory long-term plan can be developed and (ii) to provide a framework for implementation of the initial phase (Phase 2) scheduled for completion by 2011.

As in other similar large scale of redevelopment and in light of the leasing agreements with the existing tenants on the site, the implementation of the Master Plan is anticipated to occur in phases as illustrated in **Exhibit 2.3** and summarized below.

- Phase 1 (2010): Commercial renovation of part of the existing Broadmoor Mall; Development Permit has been issued
- Phase 2 (2011): Commercial-residential redevelopment - northwest corner of site; a Development Permit application has been submitted concurrently with the Rezoning Application for the overall Master Plan area
- Phase 3 (2024): Demolish Phase 1 and build mixed-use development along No. 3 Road between Petro Canada and Richlea site
- Phase 4 (2027): Demolish Safeway building and move to No. 3 Road
- Phase 5 (2031+): Petro Canada site redevelops

It can be seen that Phases 1 and 2 are expected to be completed within the next two years, while the subsequent phases (3 to 5) will occur over a longer time frame (approximately 15-20 years). The actual implementation dates may vary and are subject to the market condition and other factors which may influence the implementation considerations. As such, it should be noted that the labeling and timing of the future phases (3 to 5) above are primarily for the purpose of the transportation analysis presented in this report.



Dec 2009 N.T.S. 4493-14

Exhibit 2.2

Proposed Master Plan

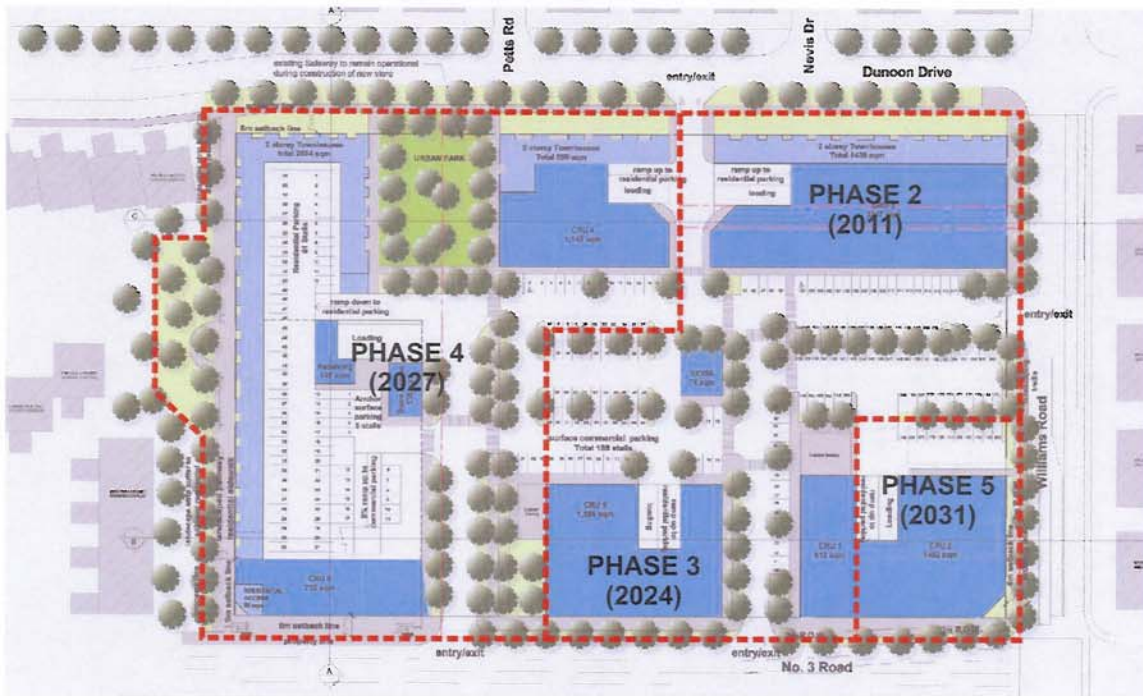
Broadmoor MP Transportation Study, Richmond, BC



Existing Layout



Proposed Master Plan



N.T.S. 4493-14

2.3 Development Scale and Mix

The existing uses in the Master Plan area consist of a total of 11,208 m² of commercial floor space. **Table 2.2** below provides a summary of the anticipated changes in development uses and the corresponding sizes. It can be seen that the total commercial floor area will remain more or less the same as the existing level. In the final phase (Phase 5), the total commercial floor area will be 11,215 m² together with a total of 187 residential dwelling units. The existing gas station will be removed from the site. The tenant mix in the commercial use is not finalized at this stage but will remain largely the same as existing and function collectively as a neighbourhood shopping centre. Therefore, the major change in land uses is the addition of residential use and removal of the gas station.

Table 2.2: Development Gross Floor Areas

Parcel	Use	Unit	Existing	Phase 2	Phase 3	Phase 4	Phase 5
Broadmoor Mall	Commercial	m ² GFA	4,333	4,882	3,907	3,907	3,907
	Residential	# units	-	64	84	84	84
Richlea Square	Commercial	m ² GFA	6,875	6,875	6,875	5,906	5,906
	Residential	# units	-	-	-	75	75
Petro Canada	Commercial	m ² GFA	-	-	-	-	1,402
	Residential	# units	-	-	-	-	28
	Gas Station	# fuelling stations	12	12	12	12	-
Total	Commercial	m ² GFA	11,208	11,757	10,782	9,813	11,215
	Residential	# units	-	64	84	159	187
	Gas Station	# fuelling stations	12	12	12	12	-

Note that 'gas station' use is typically a high traffic generator on a per-unit basis, drawing traffic from the fronting streets. The new traffic from the residential use will be somewhat offset by the reduction in gas station traffic to/from the site. Also, the mixed-use nature of the proposed development will eliminate some of the shopping trips supported by the on-site population in the new residential development.

In recently years, alternative modes of transportation, such as transit and bicycles, are actively developed in Richmond and Metro Vancouver. Overall, it can be expected that the net change in site traffic volumes will be insignificant when comparing to the existing conditions.

3.0 EXISTING CONDITION

3.1 Existing Road Network

The Master Plan area is located at the south-west quadrant of the signalized intersection of No. 3 Road and Williams Road, see **Exhibit 3.1**. It has 3 road frontages; No. 3 Road to the east, Williams Road to the north and Dunoon Drive to the west. The site abuts with Maple Village, a multi-family residential development, to the south.

No. 3 Road is a north-south major arterial road and generally provides a 4-lane cross-section. It is also a major transit corridor in the City of Richmond. The Canada Line rapid transit system terminates at the Richmond-Brighouse Station located between Saba Road and Cook Road on No. 3 Road, approximately 3km north of Broadmoor. There are several feeder bus routes passing by the site and connect to the Canada Line. No. 3 Road extends to River Road to the north and Dyke Road to the south. It intersects major east-west arterial roads, i.e. Bridgeport Road, Westminster Highway, and Steveston Highway which links with Highway 99. The posted speed on this road is 50 km/hr.

Williams Road is an east-west arterial road which accommodates one through lane in each direction. Given the number of residential driveways along this road, a two-way left-turn lane is currently provided between the No.1 Road and No.5 Road corridors. Bike lane is also provided on both sides of the roadway. At signalized or marked intersections, left-turning bays are provided at the east and west approaches. This generally '3-traffic lanes+bike lanes' cross section of roadway is also posted at a 50km/hr speed limit.

Dunoon Drive is a collector street that provides access to the nearby residential developments as well as servicing access to the Richlea Square loading dock at the end of Dunoon Drive. The Maple Lane Elementary School is located to the south-west of the southern end of Dunoon Drive. Nevis Drive and Petts Road, intersecting with Dunoon Drive, are local residential streets primarily used by local traffic due to their configuration.

3.2 Existing Traffic Volumes

To document the existing traffic characteristics in the vicinity of the Master Plan area, existing traffic volumes on the surrounding streets and at all the site access driveways were counted during the typical weekday PM peak and Saturday mid-day peak periods. A summary of the observed peak hour volumes is provided in **Exhibit 3.2**.

Traffic volumes on No. 3 Road and Williams Road are generally higher during the weekday peak periods due to the commuter traffic volumes associated with work and school trips. However, weekend street traffic volumes are lower. The existing commercial use on the site exhibits that its peak hour site traffic generation in the weekday morning period generally occurs after the typical commuter peak. As such, the worst case condition for the site when the site and street traffic volumes combined is highest during the weekday PM peak period.



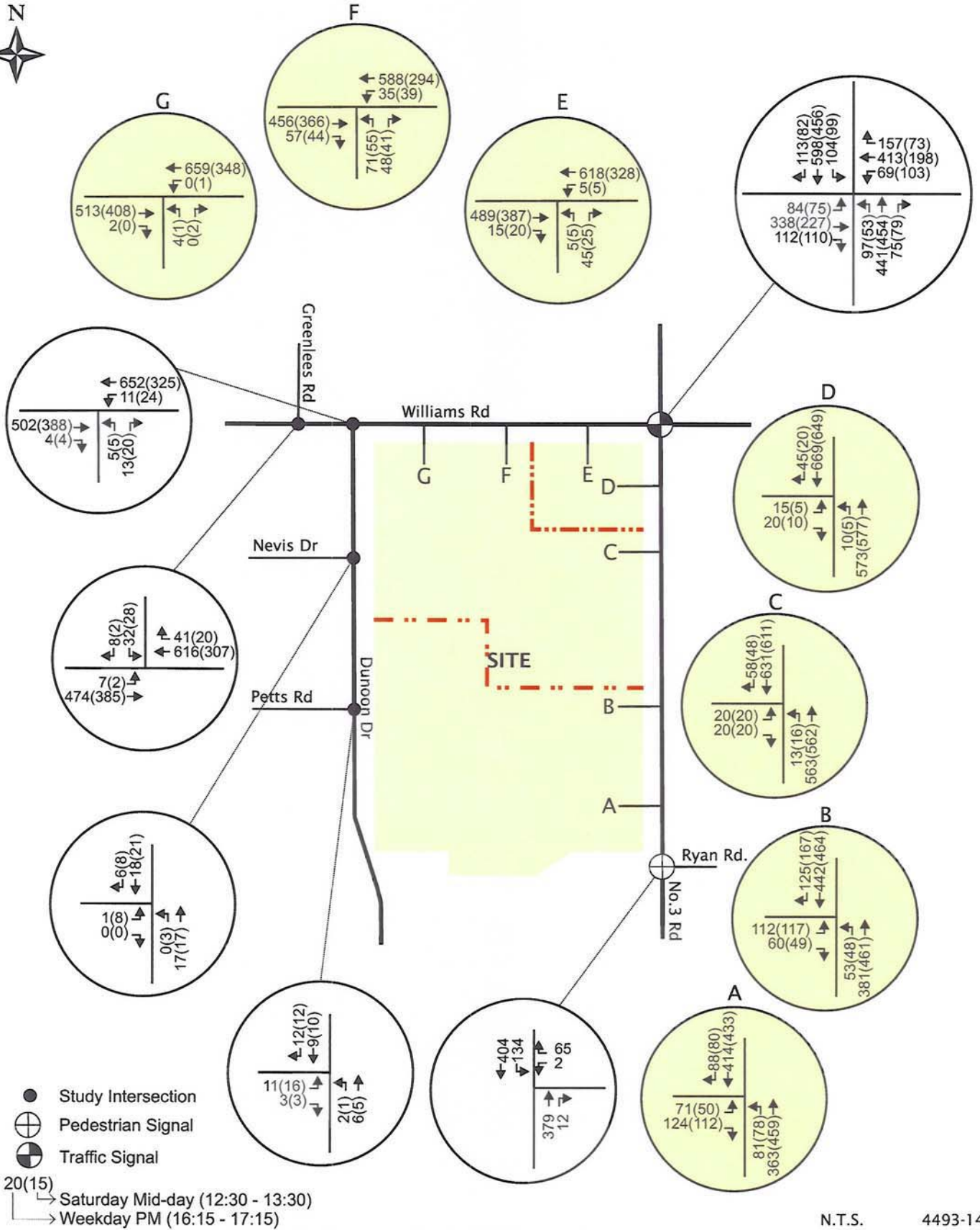
Dec 2009 N.T.S. 4493-14

Area Road Network

Broadmoor MP Transportation Study, Richmond, BC

Exhibit

3.1



N.T.S. 4493-14



Existing 2009 Peak Hour Traffic Volumes

Broadmoor MP Transportation Study, Richmond BC

Exhibit

3.2

During the Friday survey period, the observed two-way traffic volumes along No.3 Road and Williams Road are approximately 1,400 and 1,150 vehicles per hour, respectively. It is calculated that the Friday peak hour two-way traffic volume is approximately 15% higher on No.3 Road and over 50% higher on Williams Road when compared to the corresponding Saturday peak traffic volumes.

3.3 Existing Intersection Operating Performance

Intersection capacity performance was assessed using Synchro 6 traffic analysis software package, developed by Trafficware (2004). The traffic operational performance was evaluated by calculating the volume-to-capacity (V/C) ratio and the Level of Service (LOS) for each traffic movement. The V/C ratio is a measure of the traffic congestion for a particular traffic lane or lane group or an entire intersection. Generally, values up to 0.85 are considered appropriate for intersections and up to 0.90 for individual lanes or lane groups. A V/C ratio of 1.0 or greater indicates that the traffic operation is over-capacity. The LOS indicator ranges from ideal LOS A conditions with minimum or no delay through to LOS F conditions with extensive delay. At an unsignalized intersection, the LOS is based on the estimated average control delay per vehicle for each crucial movement. A control delay less than 10 seconds indicates sufficient capacity and good traffic conditions. A calculated control delay value that is greater than 50 seconds is given a LOS F.

Table 3.1 summarizes the results of the capacity analysis for the existing conditions at the key intersections around the site.

Table 3.1: Existing Intersection Performance

Intersection	Control	Friday PM Peak		Saturday Mid-day Peak	
		V/C Ratio	LOS	V/C Ratio	LOS
No.3 Road / Williams Road	Signalized	0.64	B	0.37	A
No. 3 Road / Ryan Road	Pedestrian Signal	0.25	A	nc	nc
Williams Road / Dunoon Drive	Unsignalized	-	B	-	B
Williams Road / Greenlees Road	Unsignalized	-	C	-	B
Dunoon Drive / Nevis Drive	Unsignalized	-	A	-	A
Dunoon Drive / Pettis Road	Unsignalized	-	A	-	A

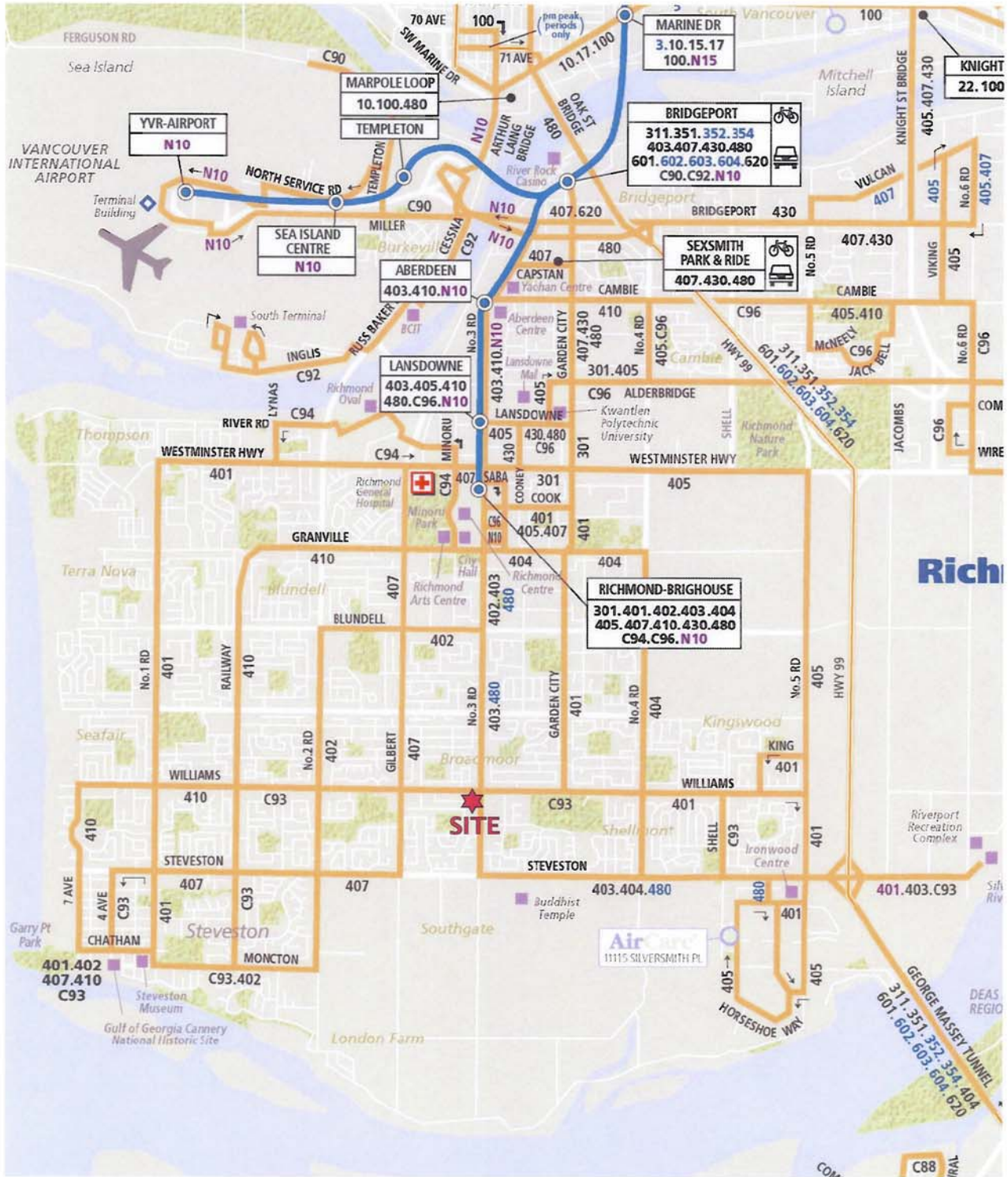
Note: nc – not calculated, no data available, performance expected to be better than Friday PM peak

With higher traffic volumes recorded during the Friday PM peak, the V/C ratios and delays are correspondingly higher than the Saturday peak period. The operational performance of the signalized intersection, however, remains within the typical design threshold, at a V/C ratio of 0.64 with a LOS B for the Friday PM peak hour and 0.37 with a LOS A for the Saturday mid-day peak hour. The unsignalized intersections analyzed currently operate satisfactorily with LOS C or better.

3.4 Existing Transit, Pedestrian and Bicycle Facilities

As illustrated in **Exhibit 3.3** showing the existing transit network in Richmond, the Master Plan site is located strategically where the local bus routes on Williams Road and No. 3 Road intersect and well connected to the regional services, such as the Canada Line, bus routes to Vancouver to the north and other bus services to the east via Westminster Highway, and Highway 99 through the Massey tunnel. Bus stops are located directly on the site frontages on Williams Road and No. 3 Road.

Dedicated bike lanes are provided on Williams Road which provide an excellent alternative for access to the shopping centre by bike. On-site provisions for bicycles and pedestrians, however, are in need for improvements due to the dated building form and site layout. The proposed Master Plan addresses this deficiency and was developed to provide an environmentally and community-friendly interconnected circulation network.



Source: www.translink.ca

N.T.S. 4493-14

4.0 DEVELOPMENT IMPACT ANALYSIS

4.1 Horizon Years

As mentioned earlier, the implementation of the Master Plan will be in phases. Phases 1 and 2 are to be completed in the short-term, by 2011. However, all other subsequent phases (3 to 5) will likely be developed in the longer term partly due to the current lease agreements with some of the tenants. The anticipated implementation dates for these later phases are 2024 and beyond. As such, two horizon years are proposed for assessing the potential development traffic impact on the area road network. These include a short-term horizon at 2011 for completion up to Phase 2 and a long-term horizon at 2031 for up to Phase 5, i.e. at the ultimate phase of the Master Plan. It should be noted that the long-term horizon (2031) is primarily an assumption for the purpose of this study. The actual completion year of the ultimate redevelopment may vary.

To ensure that the traffic plans will adequately support throughout the implementation process, traffic forecasts at the site access driveways are prepared for each phase, including

Phase 2	2011
Phase 3	2024
Phase 4	2027
Phase 5	2031

Again, the actual date for each phase and its sequence/development form are subject to change.

4.2 Site Traffic Analysis

At present, Broadmoor Mall, Richlea Square and the Petro Canada gas station are in operation. Bunt & Associates conducted a Trip Generation Survey to document the existing site traffic volumes from the existing development uses. The surveys were conducted at all the site driveways during a typical Friday PM peak period and a Saturday mid-day peak period in late October 2009. A summary of the observed volumes are provided in **Table 4.1** below together with the calculated trip generation rates.

Table 4.1: Existing Peak Hour Site Traffic

Time Period		GLA m ²	# Trips (veh/hr)			Trip Rates ⁽¹⁾		
			IN	OUT	2-WAY	IN	OUT	2-WAY
Friday PM	Broadmoor Mall	3,795	175	195	370	4.61	5.09	9.70
	Richlea Square	6,251	350	365	715	5.55	5.87	11.42
	Gas Station	12 fuelling stations	75	85	160	6.25	7.08	13.33
	Total		600	645	1,245			
Saturday Mid-day	Broadmoor Mall	3,795	145	155	300	3.90	4.03	7.93
	Richlea Square	6,251	375	325	700	5.97	5.25	11.22
	Gas Station	12 fuelling stations	50	45	95	4.17	3.75	7.92
	Total		570	525	1,095			

Note:

- (1) Trip rates for Broadmoor and Richlea commercial uses are in veh/hr per 100 m² GLA
 Trip rates for gas station use is veh/hr per fuelling station

The total site traffic generation during the peak hour from the entire Master Plan area, including the Broadmoor Mall, Richlea Square and Petro Canada gas station, is about 14% higher during the Friday PM peak than the Saturday mid-day peak, at approximately 1,245 vehicles/hour (two-way) and 1,095 vehicles/hour (two-way), respectively. It should be noted that the calculated trip rates are slightly higher than the typical rates for Shopping Centre use documented in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 7th Edition. Traffic volumes generated from the Richlea Square are observed to be at a higher rate than those from the Broadmoor Mall.

Table 4.2 shows a summary of the existing and planned development uses (at ultimate phase). The proposed commercial use will retain the existing function as a Neighbourhood Service Centre serving the Broadmoor area, consistent with the OCP policy for this location.

Table 4.2: Comparison of Gross Floor Areas

Existing			Proposed GFA
Property	Uses	GFA ⁽¹⁾	
Broadmoor Mall	Commercial	4,333 m ²	3,907 m ² 84 dwelling units
Richlea Square	Commercial	6,875 m ²	5,906 m ² 75 dwelling units
Gas Station	Gas Station	12 fuelling positions	1,402 m ² 28 dwelling units
TOTAL		11,208 m² 12 fuelling positions	11,215 m² 187 dwelling units

⁽¹⁾ Estimated from existing Gross Leasable Area

The proposed commercial floor area in the ultimate phase of the Master Plan is basically the same as the existing floor area. Since commercial and residential traffic generally do not peak in the same time period, the addition of residential use onto a commercial development will provide many advantages including more efficient use of the available transportation infrastructure and eliminating some of the vehicular trips which would otherwise travel on the surrounding road network, due to internalization of trip movements between the residential and commercial components on the site.

For conservative analysis, the observed trip rates were used to estimate the future traffic generation from the commercial component while the residential trip rates were based on the ITE trip rate No. 230 for Residential Condominium/Townhouses. Applying these trip rates for both the commercial and residential uses, **Table 4.3** presents the estimated site traffic generated by the development uses in Phases 2 to 5. Note that the commercial trip rates could be lower in practice due to the on-site population support.

Since the Background traffic condition and the anticipated site traffic volumes are more critical during the Friday PM peak, all subsequent traffic analysis documented in this report focus only on the Friday PM peak hour condition.

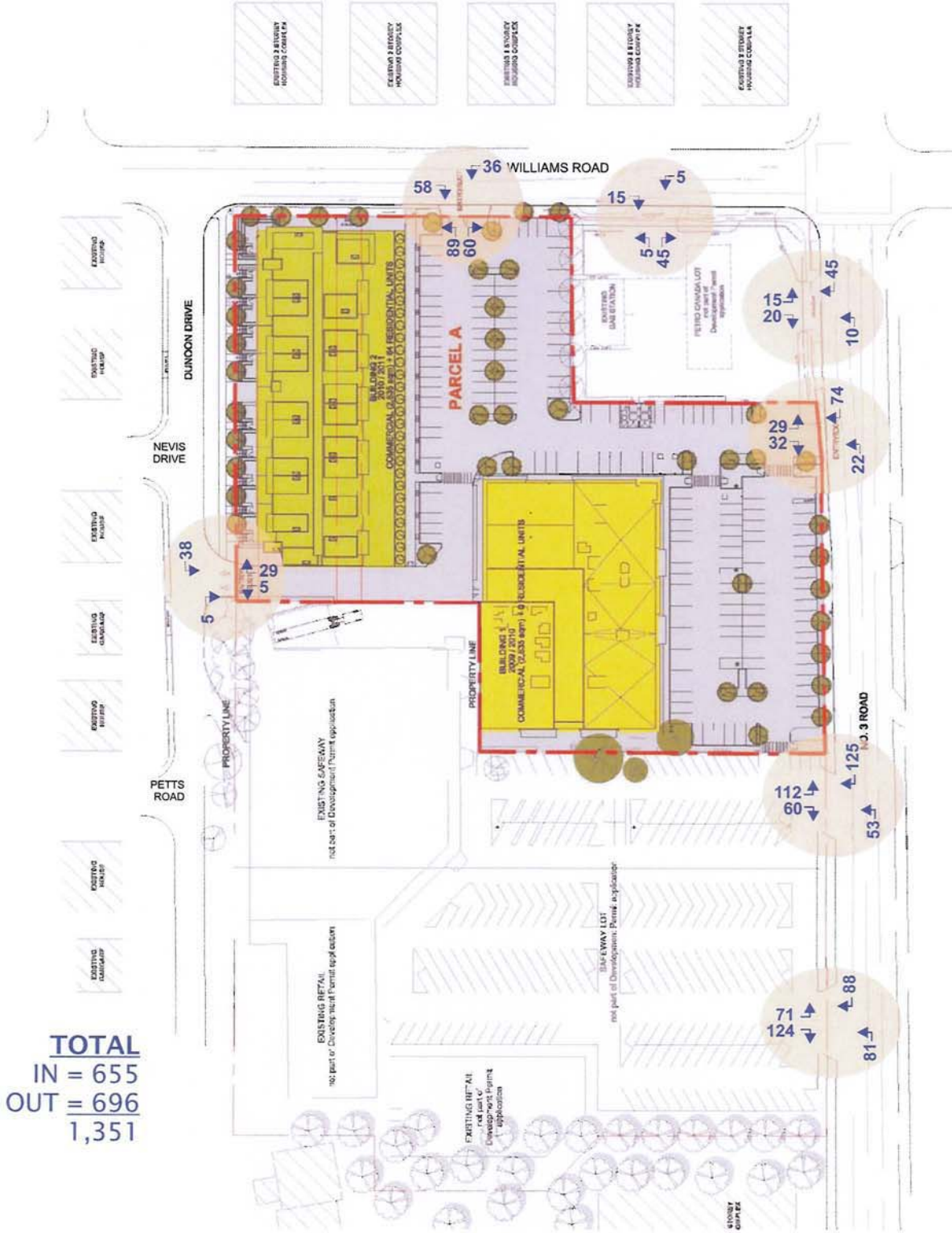
Table 4.3: Estimated Peak Hour Site Traffic Volume (Friday PM Peak)

		GLA m ²	Trip Rates			# Trips (veh/hr)		
			IN	Out	2-Way	IN	Out	2-Way
Phase 2								
Broadmoor Mall	Commercial	4,576	4.61	5.09	9.70	211	233	444
	Residential	64	0.35	0.17	0.52	22	11	33
Richlea Square	Commercial	6,251	5.55	5.87	11.42	347	367	714
Gas Station Site	# fuelling station	12	6.25	7.08	13.33	75	85	160
Total						655	696	1,351
Phase 3								
Broadmoor Mall	Commercial	4,050	4.61	5.09	9.70	187	206	393
	Residential	84	0.35	0.17	0.52	29	14	44
Richlea Square	Commercial	6,251	5.55	5.87	11.42	347	367	714
Gas Station Site	# fuelling station	12	6.25	7.08	13.33	75	85	160
Total						638	672	1,310
Phase 4								
Broadmoor Mall	Commercial	4,124	4.61	5.09	9.70	190	210	400
	Residential	84	0.35	0.17	0.52	29	14	44
Richlea Square	Commercial	5,514	5.55	5.87	11.42	306	324	630
	Residential	75	0.35	0.17	0.52	26	13	39
Gas Station Site	# fuelling station	12	6.25	7.08	13.33	75	85	160
Total						627	646	1,272
Phase 5								
Broadmoor Mall	Commercial	4,124	4.61	5.09	9.70	190	210	400
	Residential	84	0.35	0.17	0.52	29	14	44
Richlea Square	Commercial	5,514	5.55	5.87	11.42	306	324	630
	Residential	75	0.35	0.17	0.52	26	13	39
Gas Station Site	Commercial	1,262	4.61	5.09	9.70	58	64	122
	Residential	28	0.35	0.17	0.52	10	5	15
Total						620	630	1,249

Comparing with the observed 2009 traffic volumes shown in Table 4.1, the future total site traffic is estimated to be approximately the same as the existing volume largely due to the fact that the traffic generation from the existing gas station is eliminated and the addition of the multi-family residential use generates moderate traffic volume at a level similar to the existing gas station traffic.

As a result, it can be confirmed that the proposed uses and density assumed in the Master Plan would not cause any significant change in site traffic loads onto the surrounding road network. In fact, it will encourage more trips to be made by non-auto modes through the redevelopment process and the inherited planning principles in the Master Plan, for example *Interconnected circulation network* and *Alternative modes of transportation*. Existing road widths on No. 3 Road and Williams Road can be maintained.

The assignment of the site traffic during each phase (2 to 5) is shown in **Exhibits 4.1 to 4.4** respectively.



▲ 112 Friday PM Peak Hour Traffic (veh/hr)

N.T.S.

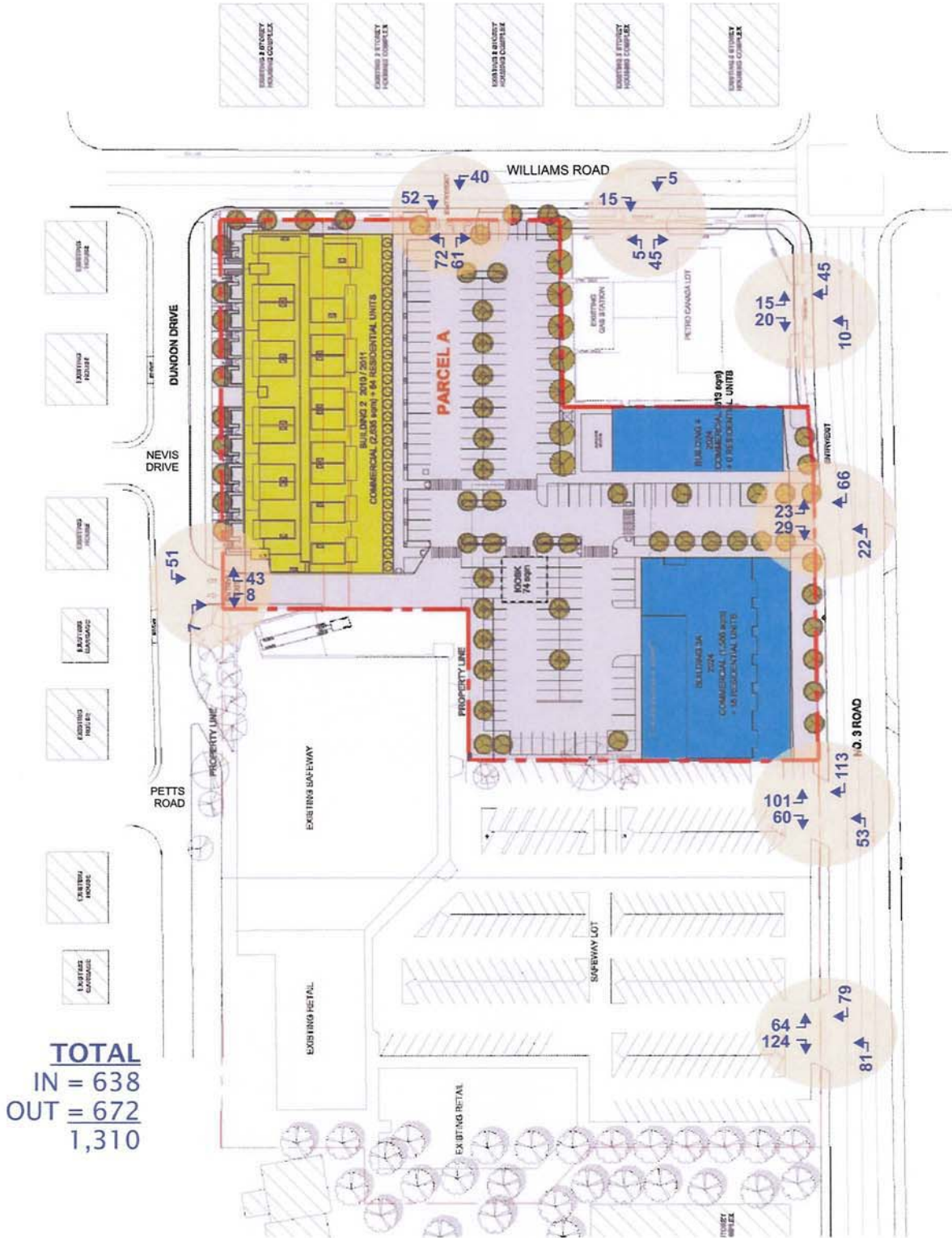
4493-14



2011 Phase 2 Development Site Traffic

Broadmoor MP Transportation Study, Richmond, BC

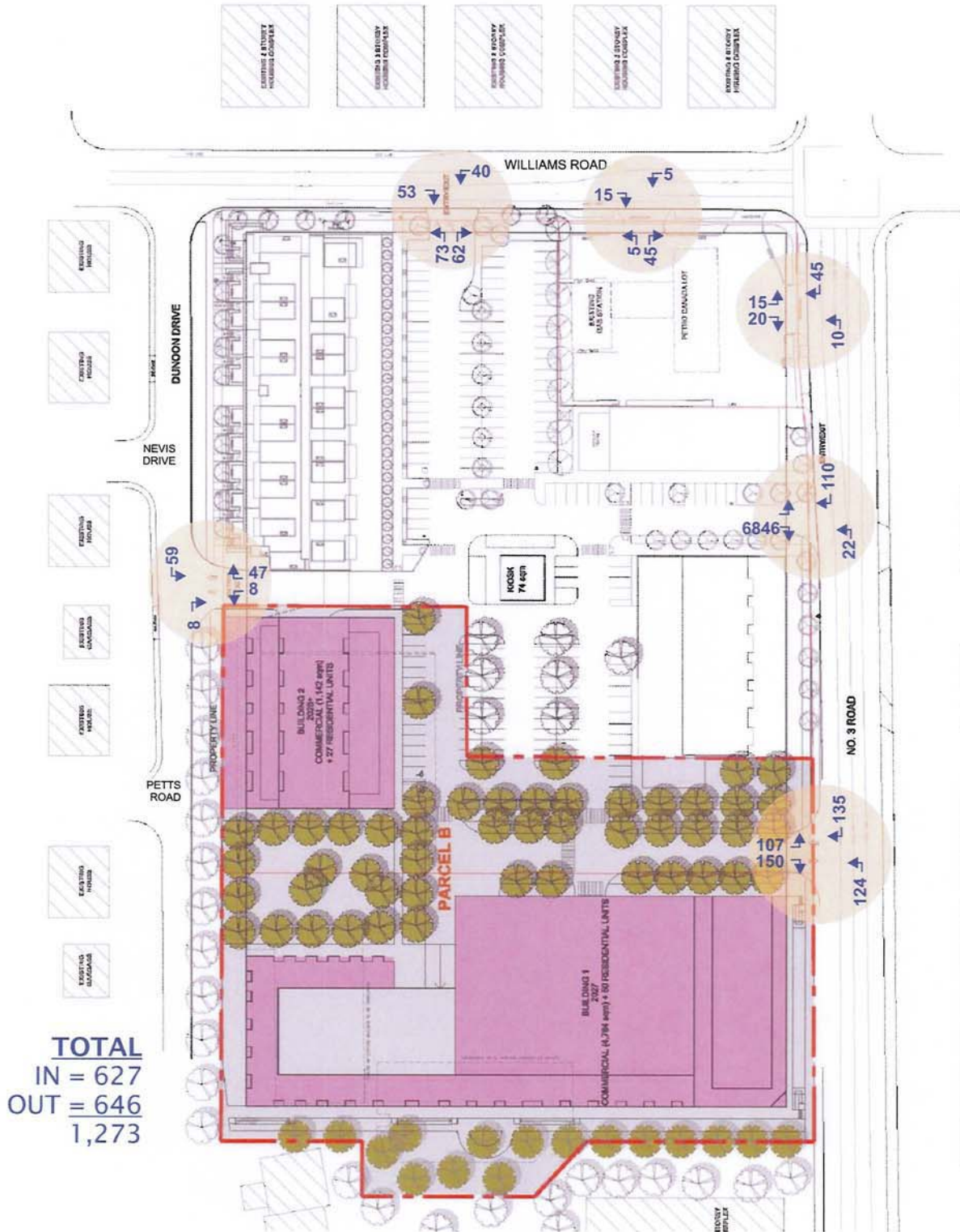
Exhibit
4.1



112 Friday PM Peak Hour Traffic (veh/hr)

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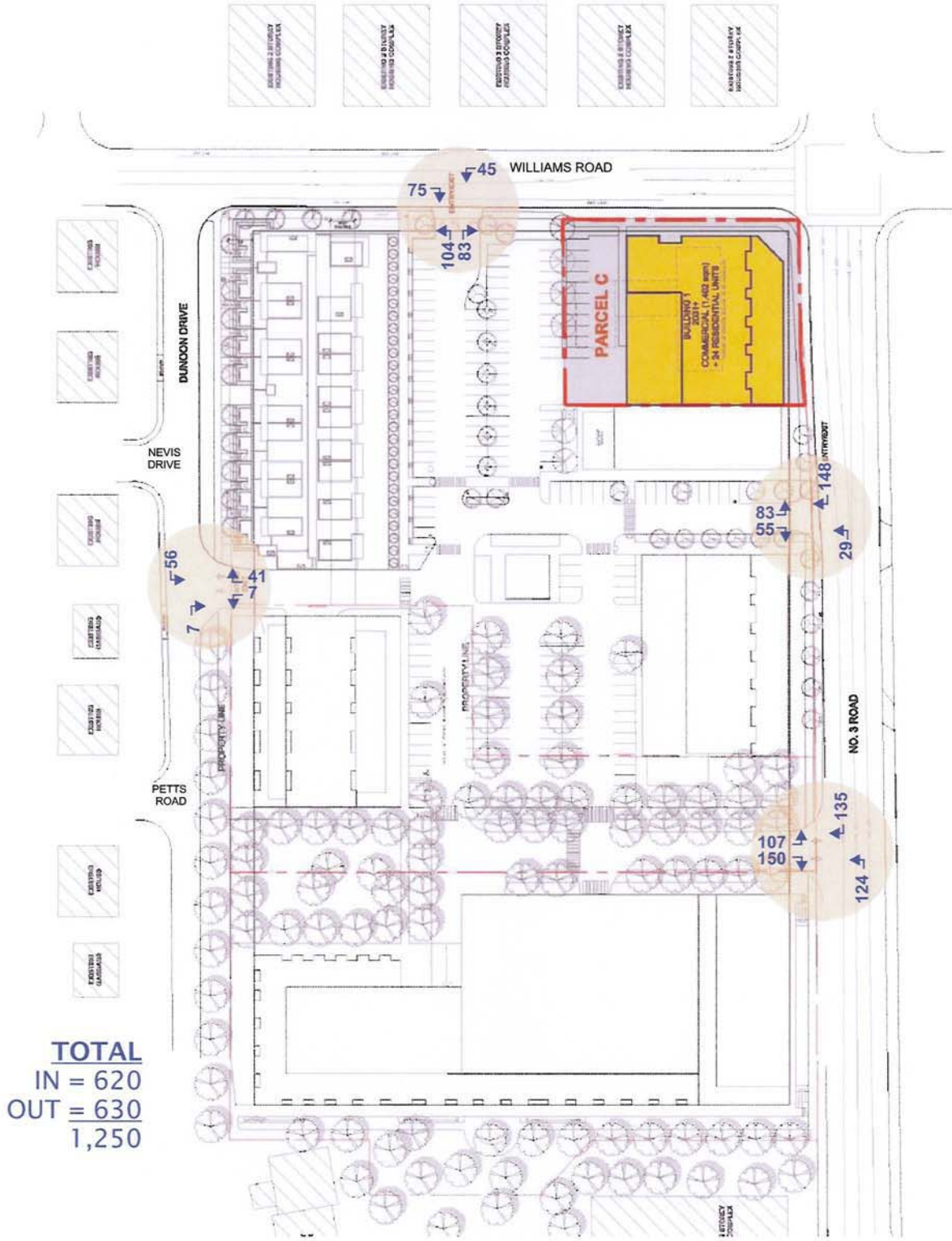
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112 Friday PM Peak Hour Traffic (veh/hr)

N.T.S.

4493-14



112 Friday PM Peak Hour Traffic (veh/hr)

N.T.S.

4493-14

4.3 Background Traffic Volumes

In examining the historical traffic count data and as discussed with city staff, projection of the Background traffic growth is proposed to be at a rate of +1.5% per annum from existing up to 2021 and at a lower rate at +0.5% per annum beyond 2021. This is considered conservative especially in light of the recent opening of the Canada Line rapid transit system on No. 3 Road connecting to the YVR airport and Vancouver Downtown.

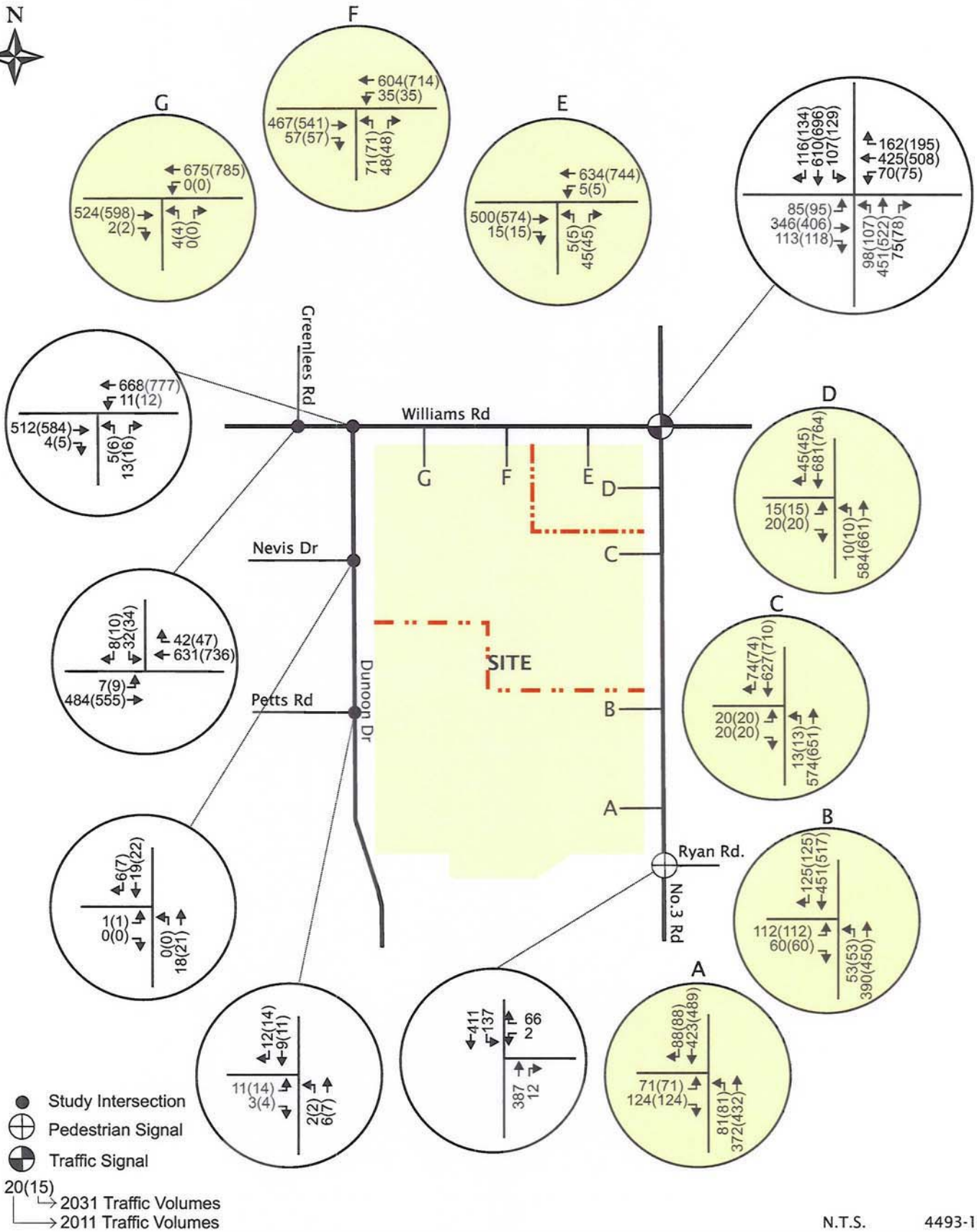
Longer term traffic forecasts are not readily available at the present moment. With ongoing growth in population and employment in the region and alternative transportation mode choices are becoming more developed and acceptable, it is anticipated that the year-to-year traffic growth in the longer term would be at a lower rate.

The projected 2011 and 2031 Background traffic volumes are shown in **Exhibit 4.5**, which assume 'do nothing' scenario, i.e. assuming that the existing development within the Master Plan area remains unchanged.

Again, the traffic operating performance at the study intersections in the 2011 and 2031 Background traffic condition is analyzed using the Synchro 6 traffic analysis package. The results of these analyses are summarized in **Table 4.4**. No capacity shortfall is anticipated.

Table 4.4: Projected Weekday PM Peak “Do Nothing” Traffic Conditions

Intersection	Control	2011		2031	
		V/C Ratio	LOS	V/C Ratio	LOS
No.3 Road / Williams Road	Signalized	0.65	B	0.81	B
No. 3 Road / Ryan Road	Pedestrian Signal	0.25	A	0.28	A
Williams Road / Dunoon Drive	Unsignalized	-	B	-	B
Williams Road / Greenlees Road	Unsignalized	-	C	-	C
Dunoon Drive / Nevis Drive	Unsignalized	-	A	-	A
Dunoon Drive / Petts Road	Unsignalized	-	A	-	A



4.4 Traffic Impact Analysis

Short Term - 2011 Traffic Conditions

The projected 2011 weekday PM peak hour Total traffic volumes were derived by adding the estimated site traffic volumes (Phases 1 and 2) onto the 2011 Background traffic volumes. These 2011 Total traffic volumes are shown in **Exhibit 4.6**. The operating performance of the study intersections was analyzed again and the results are summarized in **Table 4.5** below.

Table 4.5: Projected 2011 Total Traffic Conditions

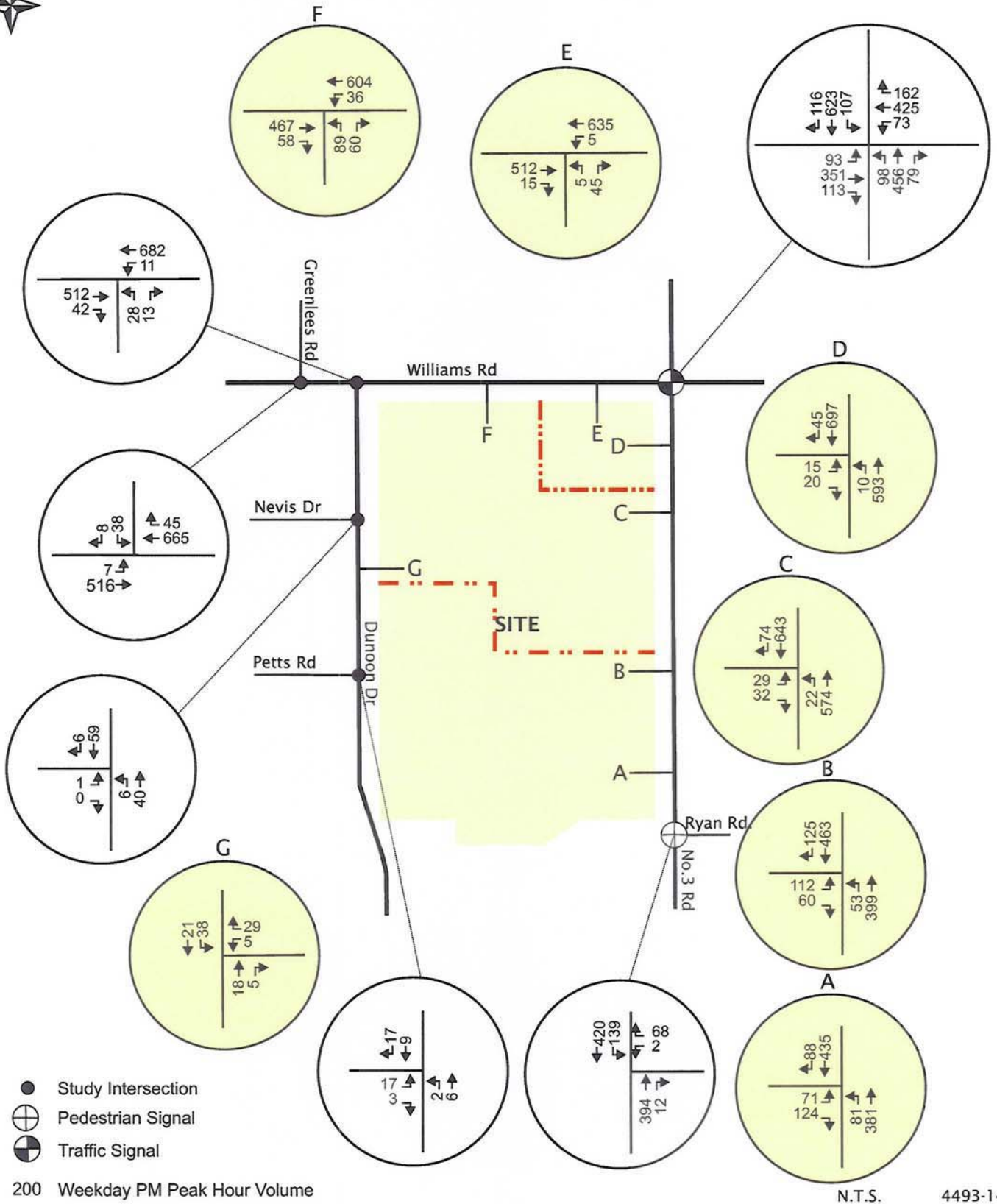
Intersection	Control	Weekday PM Peak	
		V/C Ratio	LOS
No.3 Road / Williams Road	Signalized	0.66	B
No. 3 Road / Ryan Road	Pedestrian Signal	0.25	A
Williams Road / Dunoon Drive	Unsignalized	-	C
Williams Road / Greenlees Road	Unsignalized	-	C
Dunoon Drive / Nevis Drive	Unsignalized	-	A
Dunoon Drive / Petts Road	Unsignalized	-	A

Overall, the traffic analysis of the study intersections confirms that the signalized intersection at No. 3 Road and Williams Road is expected to perform satisfactorily at a V/C ratio of 0.66 with a LOS B during the Friday PM peak hour. The pedestrian signal at Ryan Road will also operate satisfactorily. Other unsignalized intersections will operate with a LOS C or better. No additional off-site road improvements are required at this stage.

Long Term - 2031 Traffic Conditions

Analysis for the 2031 horizon was conducted to verify the traffic conditions in the long-term when the final phase of the development in the Master Plan is completed. **Exhibit 4.7** shows the projected 2031 Total traffic volumes during the Friday PM peak hour. These are the sum of the projected 2031 Background traffic volumes and the net change in site traffic volumes from the Master Plan area.

Table 4.6 shows the results of the capacity analysis. The signalized intersection at No.3 Road and Williams Road will continue to perform satisfactorily in this long-term scenario at a V/C ratio of 0.78 with a LOS B. In fact, the operating condition is slightly better than the Background condition as reported in Table 4.4 due to the redistribution of site traffic caused by the new developments. Again, all other intersections will have any significant traffic impact.



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4493-14



Projected 2011 Total Traffic Volumes

Broadmoor MP Transportation Study, Richmond BC

Exhibit
4.6

Table 4.6: Projected 2031 Total Traffic Conditions

Intersection	Control	Weekday PM Peak	
		V/C Ratio	LOS
No.3 Road / Williams Road	Signalized	0.78	B
No. 3 Road / Ryan Road	Pedestrian Signal	0.28	A
Williams Road / Dunoon Drive	Unsignalized	-	C
Williams Road / Greenlees Road	Unsignalized	-	C
Dunoon Drive / Nevis Drive	Unsignalized	-	A
Dunoon Drive / Pettis Road	Unsignalized	-	A

Site Access Considerations

The operating conditions at the site accesses were also examined for the 2011 and 2031 horizons. This includes the accesses located on No. 3 Road, Williams Road and Dunoon Drive, all assumed to be unsignalized with all movements permitted. The results of this analysis are shown in **Table 4.7** below. In the 2031 horizon, the south access on No. 3 Road is expected to operate with a LOS E on the eastbound left-turn movement, exiting the site. This is largely due to the assumed increase in the No. 3 Road Background traffic volume.

An alternative access arrangement was tested assuming that the north access on No. 3 Road is restricted to right-in/right-in and the control method at the south access is upgraded with new traffic signals. This analysis indicates that the alternative arrangement will result in a better operating condition.

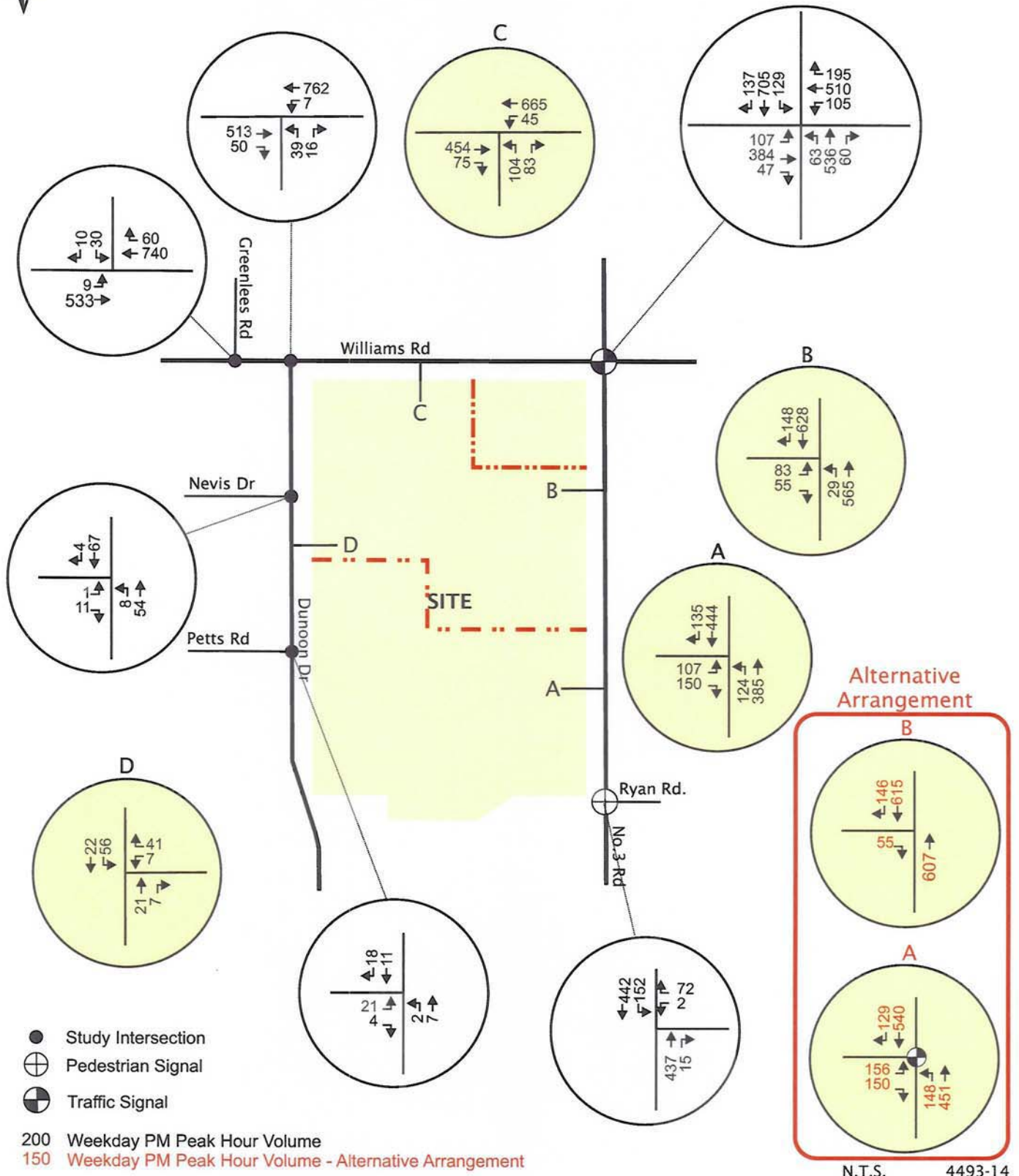
Table 4.7: Site Access Operating Conditions

Site Access	Control	Movements Permitted	Level of Service (Friday PM Peak Hour)	
			2011	2031
No.3 Road - North Access	Unsignalized	All	C	D (EB)
No. 3 Road – South Access	Unsignalized	All	D (EB)	E (EBL)
Williams Road Access	Unsignalized	All	C	C
Dunoon Drive Access	Unsignalized	All	A	A
Alternative Arrangement				
No.3 Road - North Access	Unsignalized	Right-in/ Right-out		A
No. 3 Road – South Access	Signalized	All		0.45 - A

As this involves the long-term horizon (2031), the alternative access arrangement should be reviewed again at the later phases when the design of the future developments proceeds.

As requested by city staff, a Traffic Signal Warrant Analysis was conducted for the No. 3 Road/Ryan Road intersection based on the existing traffic and pedestrian demand. A summary of the warrant analysis is included in **Appendix A**. Following the standard procedures as per the "Ministry of Transportation and Infrastructure" method, there are a total of 9 warrant criteria. Only 1 out of the 9 warrants would satisfy the criteria for traffic signals when considering the projected 5-year traffic volumes. It is considered that traffic signal is not warranted at the intersection for the Phase 2 (2011) condition. However, the warrant analysis should be reviewed later for the long-term 2031 horizon when reviewing the site access design on No. 3 Road. Note that the Ryan Road intersection is about 100m south of the development's south access on No. 3 Road. As such, the selection of intersection control methods should also consider the requirement of traffic progression along No. 3 Road and traffic interaction between intersections.

A warrant analysis was also conducted for the existing pedestrian crosswalk on Williams Road near Dunoon Drive. The analysis confirms that an upgrade to a Special Crosswalk is warranted based on the observed traffic and pedestrian volumes. However, upgrade to Pedestrian Signal is not warranted.



5.0 ON-SITE CIRCULATION, PARKING AND LOADING

5.1 On-Site Circulation

The proposed Master Plan will specifically address the following areas, improve the transportation mode choices to/from the site, and achieve a better balance in the long term.

Pedestrian and Bicycle Connections

At present, pedestrian connections between the shopping centre and the residential neighbourhood to the west are not strong - a lack of permeability combined with incomplete sidewalks around the shopping centre contributes to an inconvenient pedestrian environment. Bicycle facilities are virtually non-existent, with the exception of compressed air available at the Petro Canada gas station. The Master Plan will re-define the connections, nodes and gateways through the site and form an integral part of the entire development concept. The redevelopment of the site also allows significant improvements in the provision of on-site bicycle facilities to meet or exceed the bylaw requirement.

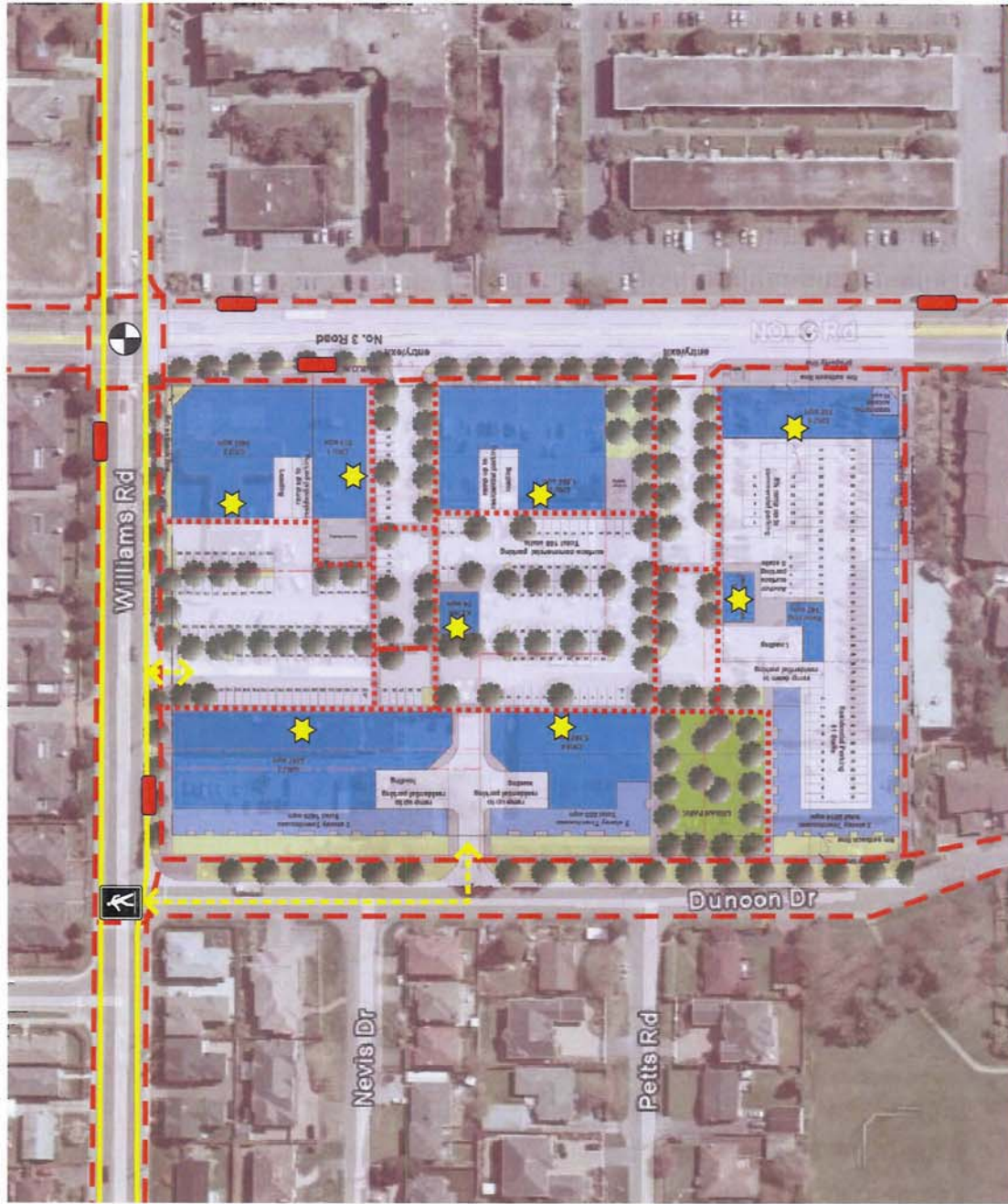
The design of the pedestrian and bicycle paths within and to/from the development site should be as direct as possible and generally meets the desire lines of travel. The development of the Master Plan includes these considerations. **Exhibit 5.1** illustrates the pedestrian and bicycle network and connections for the ultimate condition.

Transit Facilities

The Site is well served by public transit with 3 bus stops near the corner of No.3 Road (northbound and southbound) and Williams Road (westbound), and 1 stop at Williams Road (eastbound) close to Dunoon Drive. Currently, there are 3 bus routes serving the location:

- Route 403 & 480 with 10-15 minutes frequency that go along No.3 Road connecting Steveston and Richmond City Centre (onward connection to Canada Line stations to Downtown Vancouver and YVR);
- Route C93 connecting Steveston and Riverport with 30 minutes frequency.

Based on the observed bus stop activities conducted by Bunt & Associates during the peak periods, there is a significant number of people alighting from Route 403 southbound and boarding on Route 403 northbound during the peak hours. The occupancy on Route C93 is rather low, with only 1-2 people boarding or alighting during the field observations. The survey also suggests that currently spare capacity is available on the all bus routes on No. 3 Road and Williams Road during the peak periods which can adequately accommodate the future transit demand from the population in the Master Plan area.



Legend:

- ★ Commercial Frontage
- Bus Stops
- ⊙ Traffic Signal
- ⊕ Pedestrian Signal
- ⚡ Special Crosswalk
- ⋯ On-site Sidewalk
- - - On-street Sidewalk
- On-street Bike Lane
- ⚡ Bike Access to/from Site

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Exhibit 5.1

Pedestrian & Bike Routes

Broadmoor MP Transportation Study, Richmond, BC





Additional transit service along Williams has been identified as an opportunity to link the community with the South Arm Community Centre. It is recommended that the existing transit services in the adjacent area be further reviewed as and when necessary to reflect the changes in travel patterns after opening of the Canada Line.

The site is well connected to regional transit systems. The connecting bus routes to the Canada Line stations will be benefited from the new on-site population resulting increase in ridership and hence revenue. Opportunities also exist for bus shelters to be integrated with the building design.

Vehicular Access

Site accesses on No. 3 Road, Williams Road and Dumoon Drive will be consolidated through the implementation of the Master Plan. A comparison of the access arrangements is illustrated in the diagrams below. Three driveways associated with the gas station on No. 3 Road and Williams Road will be removed which eliminate the potential vehicular conflicts near the intersection of No. 3 Road and Williams Road. It can marginally increase intersection capacity of No. 3 Road/Williams Road.



Legend: ↔ External movements allowed ↔ Internal movements



Legend: ↔ External movements allowed

Commercial traffic should all ultimately access via the arterial streets (No. 3 Road and Williams Road) where, as illustrated in the Master Plan, 2 all-movements accesses will be located on No. 3 Road and 1 all-movement access on Williams Road. These accesses will accommodate all traffic including servicing trucks to/from the site. An alternative arrangement was evaluated to install traffic signals at the south access on No. 3 Road and have the north access restricted to right-in/right-out only. This alternative arrangement should be considered when required.

The existing loading area at Dunoon Drive associated with the Richlea Square will be eliminated. To facilitate the implementation of the Master Plan and before the relocation of the Safeway store, an interim inbound truck route to the existing Safeway loading dock via Dunoon Drive was proposed. This inbound truck route should be re-routed to No. 3 Road and Williams Road in later phase upon redevelopment of the Safeway store. The demand for the largest truck size to the Safeway dock is WB20 semi-trailer, one per day which typically arrives at 7:00am. At present, traffic surveys on Dunoon Drive by Bunt & Associates indicate that semi-trailer vehicles were also found using Dunoon Drive for accessing the Richlea Square, All other truck movements to/from the Master Plan area should be via the accesses on No. 3 Road or Williams Road.

On-site circulation involves consideration of efficient and safe access to/from the site by all modes, including bicycles, pedestrians, transit and vehicular traffic to on-site parking and loading facilities. The forecasts of site traffic assignment discussed in Section 4 reflect that the site generated traffic will be well distributed so that there will be no concentration of traffic movements at critical locations. The internal traffic layouts also include well defined pedestrian network so as to minimize potential conflicts with vehicular traffic.

5.2 Parking and Bicycle Requirements

Parking issues have arisen in the past at Broadmoor and Richlea shopping centres with customers not recognizing the different ownership between sites leading to conflicts between customers and shop owners. It also creates inefficient use of on-site parking supply, i.e. parking spaces not being able to be shared by all customers.

It is recommended that arrangement for shared parking between Broadmoor, Richlea and Petro Canada properties be reached as the implementation of the Master Plan progresses. This will allow developing a common pool of shared on-site parking for all commercial uses within the Master Plan area. The concept of 'shared' parking also allows flexibility in meeting the parking requirement particularly during the various construction phases, though parking supply for each building phase should preferably be self-sufficient so that it would maintain appropriate parking supply/demand balance in each parking area. Parking for residential use should be provided separately in secured parking areas, but residential visitor parking spaces can be shared with the commercial parking supply in mixed-use development. This is a common approach as in other mixed-use projects.

It is anticipated that parking demand for residential and commercial uses will decrease over time as alternative transportation modes are developed further and become more acceptable for day-to-day commutes.

In mixed-use development, residential visitor parking can practically be shared with commercial parking due to temporal variations in their demand patterns, i.e. residential visitor parking demand typically peaks in the evenings while commercial parking demand peaks in the daytime. Shared off-street parking supply is permitted under the current Parking Bylaw where maximum parking demand from individual uses occurs at different times. It is considered that the residential visitor parking demand can be adequately accommodated within the commercial parking areas and no separate parking is needed in practice for residential visitors.

Commercial Parking

Calculations of parking requirement for the commercial use was first based on the current park bylaw rates for Retail Trade & Services and the specific uses in the Phase 1 Renovation Portion. A summary of the bylaw requirements and the supply shown in the Master Plan are compared in **Table 5.1**. Details of the calculations are documented in **Appendix B**.

Table 5.1: Commercial Parking Requirements and Supply

	2011 (Phase 2)		2024 (Phase 3)		2027 (Phase 4)		2031+ (Phase 5)	
	Required	Provided	Required	Provided	Required	Provided	Required	Provided
Broadmoor Mall	199	192	158	177	158	153	158	149
Richlea Square	219	219	219	219	217	163	217	163
Gas Station	7	7	7	7	7	7	47	11
Combined	425	418	384	403	382	323	422	323
<i>% of Bylaw Req'd</i>		98.4%		104.9%		84.6%		76.5%

Notes:

Numbers in shaded areas are existing conditions

At Phase 2, the total commercial parking supply in the Master Plan area is 418 stalls whereas the requirement based on current bylaw is 425 stalls. In the longer terms when Phase 3 is developed, the total parking supply is, in fact, 5% more than the current bylaw requirement. It can be anticipated that the required commercial parking rates should be lowered over time as the Broadmoor neighbourhood area continues to develop. Therefore, the parking requirements for the long-term phases (3, 4 and 5) should be less than those calculated in Table 5.1 above. As such, the parking supply will be more closely match with the parking requirement at that time. It should be noted that lower parking supply at the Richlea development parcel is due to the proposed open space providing improved pedestrian connection between No. 3 Road and Dunoon Drive and to the park west of Dunoon.

At Phase 5, the anticipated parking shortfall is anticipated larger due to the redevelopment of the gas station site where limited number of commercial parking stalls is provided. It is

recommended that the proposed parking supply/requirement balance should be reviewed again when development of this phase proceeds.

Residential Parking

The current parking bylaw requirement is 1.5 stalls per dwelling unit plus 0.2 stall per unit for visitor parking. The actual peak parking demand is anticipated to be lower than the bylaw requirement due to (1) the mixed-use effect of the project which generally reduces travel demand, (2) the proposed transportation demand management (TDM) measures to be implemented with the Master Plan, and (3) parking requirement can be anticipated to be lower overtime as the area continues to develop and regional and local transit services improve. As noted earlier, residential visitor parking can be mixed with commercial parking, as in other mixed-use projects, due to their temporal variations in parking demand.

A summary of the residential parking supply and requirement based on the current bylaw is calculated in **Table 5.2** below. Again, detailed residential parking analysis is documented in **Appendix B**.

Table 5.2: Residential Parking Requirements and Supply

	2011 (Phase 2)		2024 (Phase 3)		2027 (Phase 4)		2031+ (Phase 5)	
	Required	Provided	Required	Provided	Required	Provided	Required	Provided
Broadmoor Mall	109	84	143	125	143	125	143	125
Richlea Square	-	-	-	-	128	93	128	93
Gas Station	-	-	-	-	-	-	48	44
Combined	109	84	143	125	271	218	318	262
<i>Total # dwelling units</i>	<i>64 units</i>		<i>84 units</i>		<i>159 units</i>		<i>187 units</i>	
<i>Average Parking Supply Rate</i>	<i>1.31 stalls per unit</i>		<i>1.49 stalls per unit</i>		<i>1.37 stalls per unit</i>		<i>1.40 stalls per unit</i>	

The average parking supply rate is approximately 1.31 stalls per unit in Phase 2 and 1.40 stalls per unit in the ultimate phase. The critical supply condition is in Phase 2. However, as in the detailed parking analysis conducted in the Traffic Impact Study for the Phase 2 development, the average unit size of the proposed 64 dwelling units is approximately 810 sf, including 44 one-bedroom units with floor area of 750 sf or less. As such, the bylaw rate at 1.5 stalls per units plus 0.2 stalls per unit for visitor parking are considered excessive. In the later phases (3 to 5), the proposed parking supply rates are higher.

Understanding the parking standard approaches adopted in other cities and municipalities for compact pedestrian-/ transit-orientated communities provides the basis for assessing the

requirement for Broadmoor. Parking standards for multi-family units are presented for a selected number of municipalities and cities within Metro Vancouver in **Table 5.3**.

Table 5.3: Parking Standards for Urban Centres

City	Bylaw Parking Rate (absolute minimums)
Burnaby P11e (UniverCity at SFU)	1 stall per unit for 1-bedroom unit + 0.1 stall for each additional bedroom; visitor parking 0.1 stall per unit
City of Vancouver (Non-downtown)	0.5 stall per unit up to 50 m ² ; and after that 0.6 stall per unit + A / 200 m ² GFA up to a maximum of 1.5 stalls per unit; inclusive of visitor parking
City of New Westminster (under review)	1.0 – 2.0 stalls per unit; including visitors (relaxations allowed)
City of North Vancouver	1.2 stalls per unit; inclusive of 0.2 for visitors

Evidently, parking rates in these municipalities are starting to approach the 1 stall per unit level. Also, New Westminster is currently reviewing their parking by-law and in the interim they are accepting relaxations at around 1.2 stalls per unit in certain locations (inclusive of visitor parking).

Car-Sharing Schemes are also becoming more popular and put in use more often. The following examines the planning context in North America for incorporating car-sharing schemes within bylaws for new developments. **Table 5.4** summarizes the cities where car-sharing schemes are established or where the city has or is planning to amend their planning code to encourage participation in such schemes.

Table 5.4: Parking Status for Developments with Car-Sharing Schemes

Location	Planning Status
Arlington County, VA	Parking reductions are negotiated as part of the overall TDM package. Arlington prefers credits for tenants instead of dedicating car-sharing vehicles, and this allows vehicles to be located on-street or in other 'communal' off-street parking locations.
Austin, TX	The proposed code amendment recommends that 1 car-sharing vehicle be allowed to replace 20 parking spaces for projects with at least 100 residential units.
Vancouver, BC	The City allows a reduction of three parking spaces per car-sharing vehicle (net reduction of 2) for every 60 units. The vehicle must be provided by the developer and is subject to the filing of a satisfactory agreement between the developer and the car-sharing operator.
San Francisco, CA	Permits 1 car-sharing vehicle to be provided for every 200 units with parking reductions determined on a case-by-case basis.
Seattle, WA	The City has no specific standards for parking space reduction through the introduction of car-sharing vehicles. This is due, in part, to the City having low parking standards.
Portland, OR	As Seattle

Evidently from this table there is no consistency between the cities' approaches to car-sharing. On one hand, some cities offer incentives to developers to reduce parking levels through either subsidizing or providing car-sharing vehicles and/or spaces, while others (Seattle, Portland) have low minimum parking standards (or are removing their standards for accessible locations) and hence have no reduction measures.

More and more municipalities have updated their residential parking requirement to reflect the size of the dwelling units or the numbers of bedrooms, as these parameters are found to be more closely correlated to the actual parking demand and affordability. The following minimum parking rates are proposed and to be reviewed in conjunction with the development applications:

Studio	0.5 stall per unit
One Bedroom	1 stall per unit
Two Bedrooms	1.5 stalls per unit
Three Bedrooms or more	2 stalls per unit

(Rates inclusive of 0.1 stall per unit for visitor parking)

Combined the analysis for commercial and residential parking to reflect the mixed use effect of the Master Plan area, **Table 5.5** provides a summary of the parking supply/requirement balance to highlight the anticipated conditions. It should be noted that the required residential supply excludes the 0.2 visitor stall per unit for mixed-use conditions.

Table 5.5: Combined Parking Requirement/Supply Balance

	2011 (Phase 2)		2024 (Phase 3)		2027 (Phase 4)		2031+ (Phase 5)	
	Required	Provided	Required	Provided	Required	Provided	Required	Provided
Commercial	425	418	384	403	382	323	422	323
Residential	96 ⁽¹⁾	84	126 ⁽¹⁾	125	239 ⁽¹⁾	218	281 ⁽¹⁾	262
Total	521	502	510	528	621	541	703	585
% Bylaw Requirement		96%		104%		87%		83%

Note: (1) Exclude the 0.2 stall per unit for visitor parking for shared parking

Again, the analysis indicates that the parking supply/requirement balance should be reviewed again at the later phases, especially for Phases 4 and 5 when redevelopment occurs at the Richlea and Petro Canada parcels.

Bicycle Parking

To encourage the use of alternative modes of transportation and to support the proposed residential parking rates, adequate supply of bicycle parking spaces on-site should be provided. These should be in combination with ease of access and direct connectivity through the site and to/from the external areas. To guide the design of the building plans, **Table 5.6** shows the calculations of the bicycle parking requirements based on the current bylaw. This should be reviewed, as and when necessary, in light of the overall planning objectives.

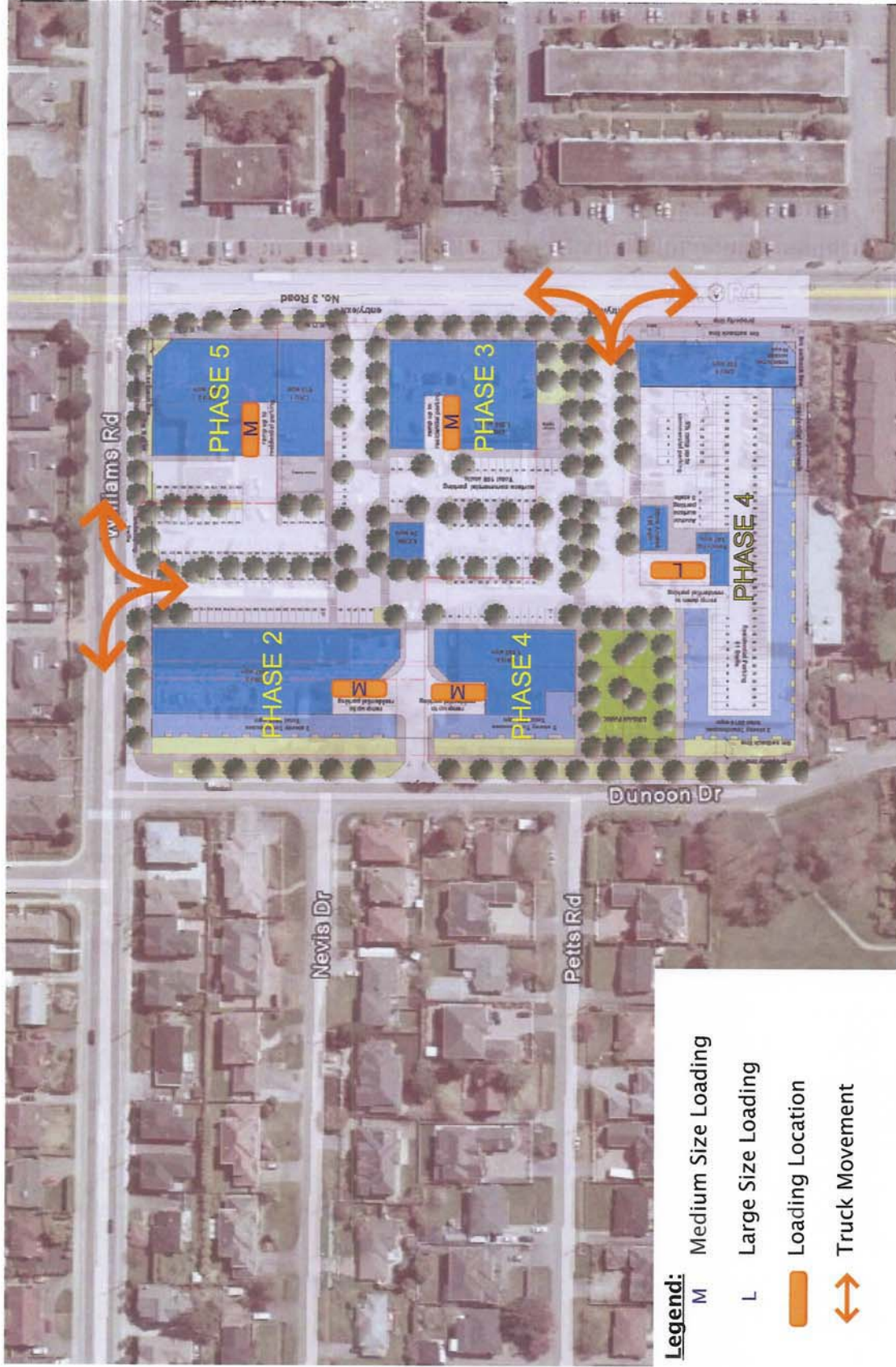
Table 5.6: Bicycle Parking Spaces Required

Use	Size		Bylaw Rates	
			Class 1	Class 2
Retail Trade & Services; Food Catering Establishment			0.27 spaces per each 100 m ² (1,076 ft ²) of gross leasable floor area greater than 100 m ² (1,076 ft ²)	0.4 spaces per each 100 m ² (1,076 ft ²) of gross leasable floor area greater than 100 m ² (1,076 ft ²)
Residential			1.25 spaces per dwelling unit	0.2 spaces per dwelling unit

		Use	# Bicycle Spaces	
Requirement at each phase	Phase 2	Commercial	6	8
		Residential	80	13
	Phase 3	Commercial	6	8
		Residential	25	4
	Phase 4	Commercial	15	22
		Residential	94	15
	Phase 5	Commercial	4	5
		Residential	35	6

5.3 Loading Plan

Exhibit 5.2 illustrates the locations of the loading docks shown in the Master Plan. Access to/from these loading docks should be via the accesses on No. 3 Road or Williams Road. To support the early phase of the redevelopment, an interim inbound truck route via Dunoon Drive to the existing Safeway loading dock was studied and is considered feasible from a transportation perspective. This interim inbound route should be eliminated upon redevelopment of the Safeway store.

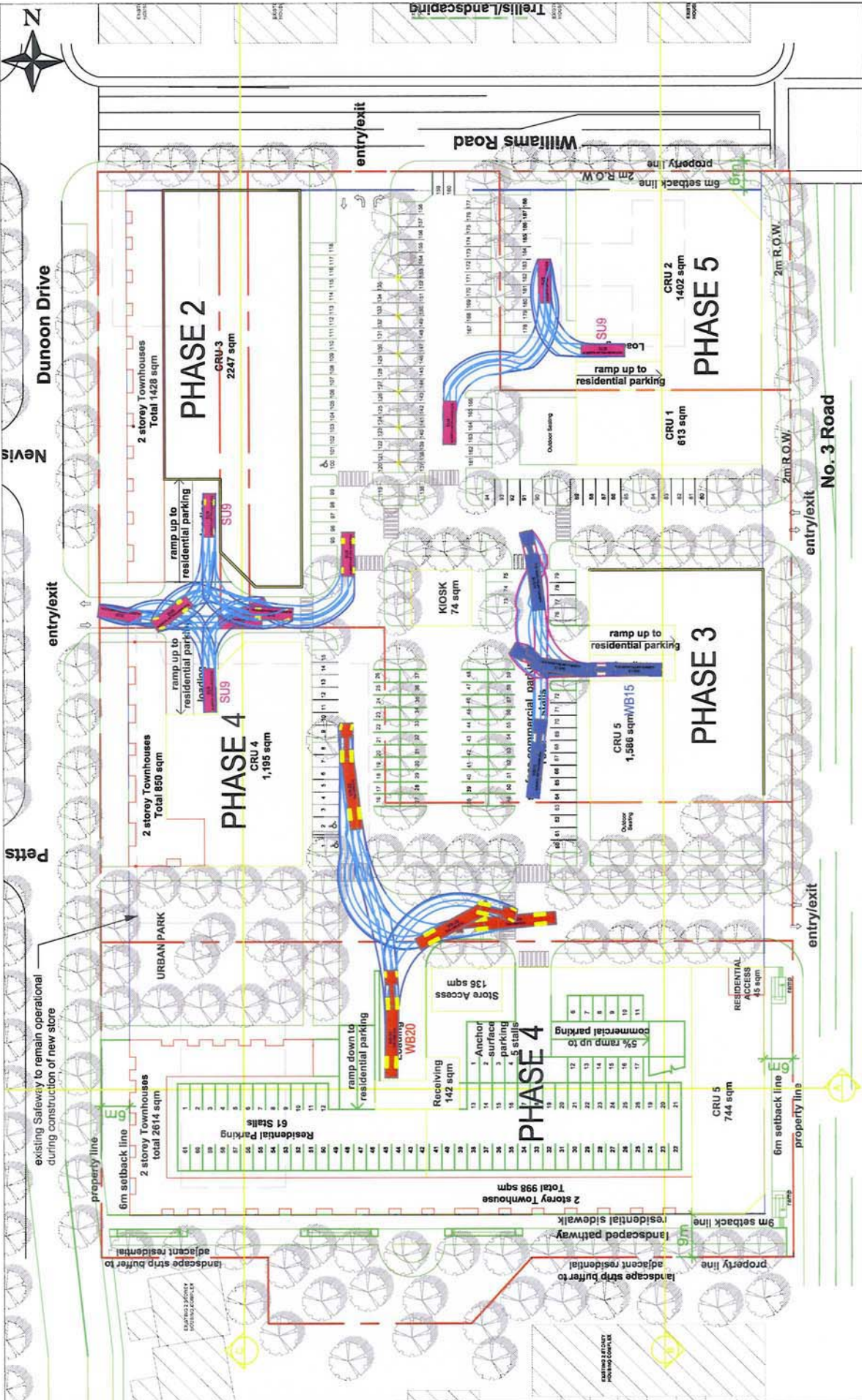


The Parking Bylaw outlines the requirements for the provision of off-street loading facilities. These requirements include medium-size (9.1m x 3.0m) and large-size (18.4m x 3.5m) loading spaces. The proposed residential component in the Master Plan (Phases 2 to 5) accommodates about 20 to 75 dwelling units in each building. As such, so specific loading spaces is required. **Table 5.7** shows the calculated loading requirement for the commercial uses from Phase 2 to 5.

Table 5.7: Commercial Loading Requirements

Phase	Floor Area m ² GLA	Bylaw Requirements			# Spaces Shown in Master Plan
		Medium Size Spaces	Large Size Spaces	Minimum # Spaces	
2	2,071	On-site designated: 1 space, plus 1 space for each additional 5,000m ² over 1,860m ²	On-site designated: 1 space for each 5,000m ² over 1,860m ²	1 medium size	1 medium size
3	2,053			1 medium size	1 medium size
4	1,028	On-site designated: 1 space	N/A	1 medium size	1 medium size
	4,486	On-site designated: 1 space, plus 1 space for each additional 5,000m ² over 1,860m ²	On-site designated: 1 space for each 5,000m ² over 1,860m ²	1 medium size	1 medium size; 1 large size
5	1,262	On-site designated: 1 space	N/A	1 medium size	1 medium size

As illustrated in **Exhibit 5.3**, the design for these loading spaces has been assumed to be medium size spaces with the Phase 3 building accessible for large size vehicle if needed. As verified in Exhibit 5.3, adequate vehicle turning area is available in accessing these loading spaces. However, the specific design should be checked again during the subsequent design development stage for each phase.



Truck Turning Movements

Broadmoor MP Transportation Study, Richmond, BC

6.0 TRANSPORTATION DEMAND MANAGEMENT

6.1 Proposed TDM Plan

A Transportation Demand Management (TDM) plan was developed for the initial Phase 2 development to reduce automobile dependency, and thus parking demand number. Details of the Phase 2 TDM plan are outlined in the Traffic Impact Study report prepared separately by Bunt & Associates. This plan should be monitored as a continuously effort throughout the implementation of the Master Plan so that the transportation planning objectives of the overall Master Plan can be maintained at all times. The following discussion covers the general principles for the TDM plan to support the proposed mixed-use developments:

1. *Shared Parking*

- Shared parking effects exist virtually in all mixed-use environments where the overall parking demand is 'dampened' due to the fact that the peak parking demands from individual uses do not occur at the same time. As such, provision for lowering than the required parking bylaw requirement would not cause any undesirable impact;
- An example of shared parking is residential visitor parking to be mixed with commercial parking. Since these uses peak at different times and hence no separate residential visitor parking spaces are required in practice;
- Where feasible, develop an easement agreement among the owners of the properties within the Master Plan area, i.e. Broadmoor, Richlea and Petro Canada, to allow commercial parking spaces to be shared among all individual commercial tenants and customers.

2. *Car-Sharing*

- Car sharing has become more popular in Metro Vancouver, for example those operated by Zipcar and Co-operative Auto Network;
- Provide spaces for car-sharing parking located in the ground level commercial parking area; this allows 24/7 access;
- Where appropriate, contribute to the purchase of car-sharing vehicle(s) and located on the site. These may be used by residents on the site, commercial employees and the general public.

3. *Bicycles and Pedestrians*

- Provide enhanced end-of-trip bicycle facilities on-site including Class 1 bike storage within the mixed-use buildings and Class 2 bike racks installed near building entrances;
- Provide clear and safe pedestrian paths to/from and within the Site;
- Provide signed bicycle/pedestrian network to/from the site.

4. Transit

- Fund to build integrated shelters for bus stops fronting the Site, included with transit system maps and related travel information and other facilities which can help promoting the use of transit services;
- Where appropriate, consider providing subsidized transit passes, e.g. commercial employees and residents.

6.2 Neighbourhood Traffic Calming

The proposed Broadmoor Shopping Centre Master Plan takes on the advantage of its frontages on two arterial streets; No. 3 Road in the north-south direction and Williams Road in the east-west direction. The primarily vehicular accesses for the site should be located at these arterial streets.

As in other neighbourhood shopping centres, unnecessary traffic penetration into the nearby residential areas is one of the prime considerations in the design process. There have been some concerns from the neighbourhood regarding potential traffic short-cutting in the area and also noise disruption due to truck access to Safeway through Dunoon Drive in the initial phase.

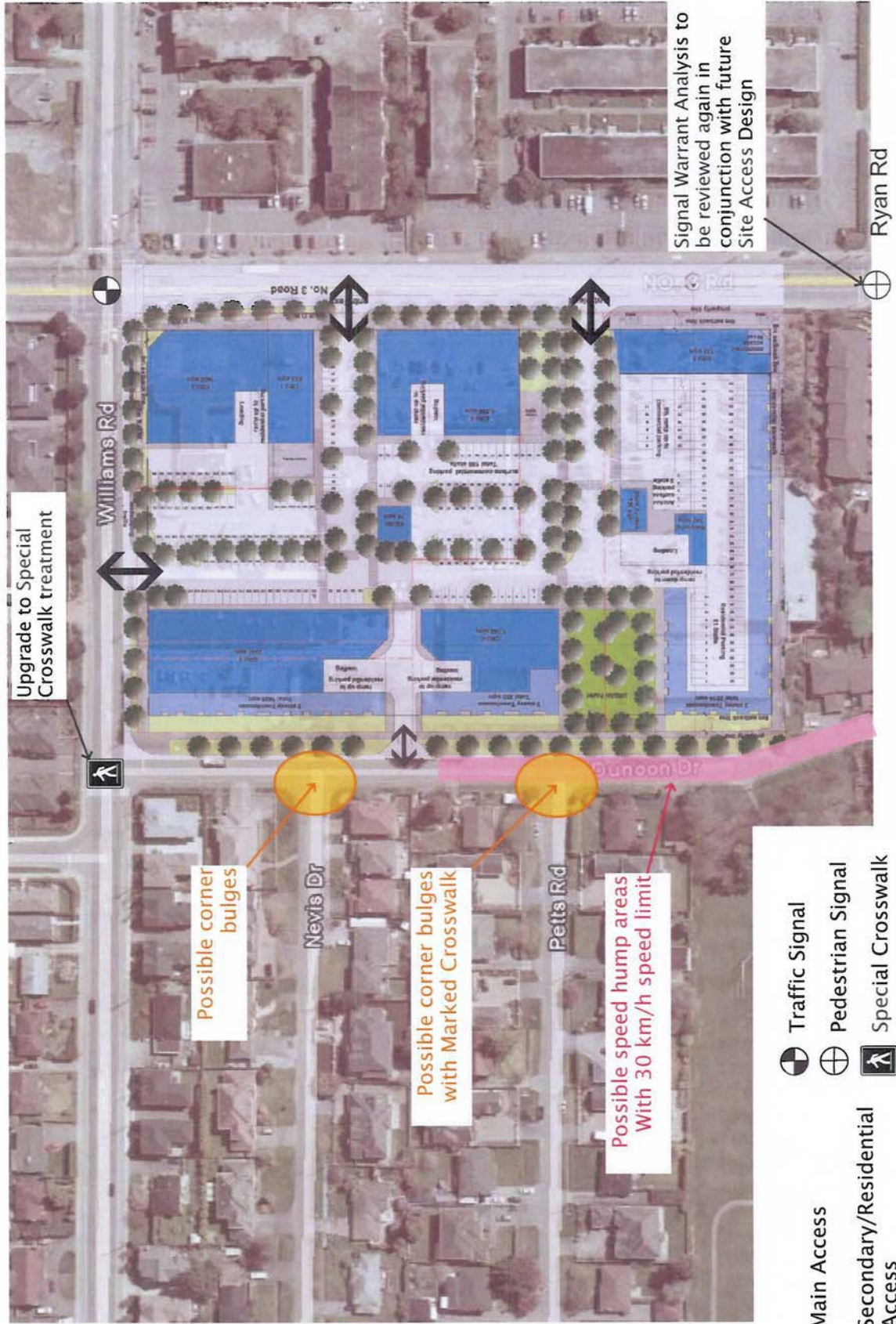
The proposed on-site traffic circulation and site access arrangement directs commercial traffic via the arterial streets (No. 3 Road and Williams Road). The Dunoon access in the long term will primarily be used by residential traffic. The connection between No. 3 Road and Dunoon Drive through the site has been made indirect and unattractive.

To further mitigate any undesirable impact, traffic calming measures should be considered and implemented, as required, in consultation with the stakeholders including nearby residents, schools, etc. These traffic calming measures may include:

- Corner bulges on Dunoon Drive to narrow traffic lane width, shorter crosswalk distance and reduce vehicle speed; this would be desirable at later phase when the interim Dunoon inbound truck access is not required
- Provide marked crosswalk at Dunoon Drive south of Petts Road with a 30 km/h sign approaching the park/playground
- Consider speed humps on Nevis Drive and Petts Road.

See examples in **Exhibit 6.1**.

At present, an existing marked pedestrian crosswalk is located west of Dunoon Drive on Williams Road. A warrant analysis has been conducted using the existing traffic and pedestrian volumes. The analysis confirms that an upgrade of this crosswalk to "Special Crosswalk" is warranted (but not to "Pedestrian Signal").



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Exhibit 6.1

Possible Neighbourhood Traffic Calming Measures

Broadmoor MP Transportation Study, Richmond, BC



7.0 CONCLUSIONS

A master planning exercise was conducted which develops a planning framework and guiding principles for the redevelopment of the Broadmoor Mall, Richlea Square and Petro Canada gas station located at the south-west quadrant of the intersection of No. 3 Road and Williams Road in the City of Richmond. This is called "*the Broadmoor Shopping Centre Master Plan*". The implementation of the Master Plan will transform the Site into one of the Neighbourhood Service Centres as envisaged in Richmond's Official Community Plan.

Bunt & Associates was commissioned by First Capital Realty Inc. to conduct a Transportation Study for the proposed Broadmoor Shopping Centre Master Plan. The study examined the transportation component of the Master Plan and recommended measures to ensure that the overall transportation objectives can be maintained throughout the implementation process.

The redevelopment of the Master Plan will be in phases over the next 20-30 years. Concurrent to the Rezoning Application for the Master Plan, First Capital Realty Inc. proposes to proceed with the initial phase of redevelopment within the existing Broadmoor Mall parcel. A separate Traffic Impact Study was prepared by Bunt & Associates to support the Development Permit Application already submitted to the City. One of the objectives of the Transportation Study for the Master Plan is to ensure that the planning and design of this early phase will be consistent with the ultimate Master Plan requirements.

It is concluded that (1) the transportation analysis and review conducted in this study has established transportation inputs to the required planning parameters for the overall Master Plan, and (2) the development of the Phase 2 in the Broadmoor Mall parcel can be supported from a transportation perspective and within the context of the overall Master Plan.

Appendix A:

Traffic Signal Warrant Analysis for the Intersection of No. 3 Road / Ryan Road

WARRANT NO.1 MINIMUM VEHICULAR VOLUME

Number of Incoming Lanes on Approach		Large Urban Areas (> 10000 population)				Small Urban Areas (<10000 population)	
		Posted or 85th Percentile Speed					
		=< 70 km/hr		> 70 km/hr		Peak 7 Hour Volume (vph)	
		Peak 7 Hour Volume (vph)		Peak 7 Hour Volume (vph)			
Major	Minor	Major	Minor	Major	Minor	Major	Minor
1	1	500	150	350	105	350	105
2 or more	1	600	150	420	105	420	105
2 or more	2 or more	600	200	420	140	420	140
1	2 or more	500	200	350	140	350	140

Existing Scenario to be Considered			
Number of Incoming Lanes on Approach		Minimum Volumes	
Major	Minor	Major	Minor
2 or more	1	600	150

Existing Traffic Volumes (by Approach)

8 hours traffic volume on an average day

Time Period	Total of Both Major Approaches	Higher than Minimum?
6am to 7am	231	No
7am to 8am	488	No
8am to 9am	824	Yes
2pm to 3pm	863	Yes
3pm to 4pm	937	Yes
4pm to 5pm	956	Yes
5pm to 6pm	903	Yes
6pm to 7pm	748	Yes
Average 8-hr	744	

Existing Traffic Volumes (by Approach)

8 hours traffic volume on an average day

Time Period	Higher of Each Minor Approaches	Higher than Minimum?
6am to 7am	70	No
7am to 8am	81	No
8am to 9am	167	Yes
2pm to 3pm	74	No
3pm to 4pm	91	No
4pm to 5pm	90	No
5pm to 6pm	72	No
6pm to 7pm	75	No
Average 8-hr	90	

Warrant Satisfied? Yes No

Explanation: The warrant is not satisfied. Only 1 of the 8 hours traffic volume meet the minimum volumes

WARRANT NO.2 Interruption of Continuous Traffic

Number of Incoming Lanes on Approach		Large Urban Areas (> 10000 population)				Small Urban Areas (<10000 population)	
		Posted or 85th Percentile Speed					
		=< 70 km/hr		> 70 km/hr			
		Peak 7 Hour Volume (vph)		Peak 7 Hour Volume (vph)		Peak 7 Hour Volume (vph)	
Major	Minor	Major	Minor	Major	Minor	Major	Minor
1	1	750	75	525	50	525	50
2 or more	1	900	75	630	50	630	50
2 or more	2 or more	900	100	630	70	630	70
1	2 or more	750	100	525	70	525	70

Existing Scenario to be Considered			
Number of Incoming Lanes on Approach		Minimum Volumes	
Major	Minor	Major	Minor
2 or more	1	900	75

Existing Traffic Volumes (by Approach)

8 hours traffic volume on an average day

Time Period	Total of Both Major Approaches	Higher than Minimum?
6am to 7am	231	No
7am to 8am	488	No
8am to 9am	824	No
2pm to 3pm	863	No
3pm to 4pm	937	Yes
4pm to 5pm	956	Yes
5pm to 6pm	903	Yes
6pm to 7pm	748	No
Average 8-hr	744	

Existing Traffic Volumes (by Approach)

8 hours traffic volume on an average day

Time Period	Higher of Each Minor Approaches	Higher than Minimum?
6am to 7am	70	No
7am to 8am	81	Yes
8am to 9am	167	Yes
2pm to 3pm	74	No
3pm to 4pm	91	Yes
4pm to 5pm	90	Yes
5pm to 6pm	72	No
6pm to 7pm	75	No
Average 8-hr	90	

Warrant Satisfied? Yes No

Explanation: The warrant is not satisfied. Only 2 hours of traffic volume exceed the minimum vehicular volume criteria.

WARRANT NO.3 Progressive Movement

1) Is the distance to the nearest signal greater than or equal to 300m? Yes No

One Way

Are the adjacent signals so far apart that they do not provide a necessary degree of vehicle platooning and speed control? ~~Yes~~ ~~No~~

Two Way

Do the adjacent signals constitute a progressive system? Yes No

Are the adjacent signals so far apart that they do not provide a necessary degree of vehicle platooning and speed control? Yes No

Warrant Satisfied? Yes No

Explanation: The adjacent signals do not constitute a progressive system, and the installation of a signal at this location will not provide a necessary degree of vehicle platooning and speed control.

WARRANT NO.4 Accident Experience (based on ICBC Claims Data)

1) Have five or more reported accidents of types susceptible to correction by traffic signals occurred within a 12 month period, with each accident involving personal injury or damage exceeding \$1000? Yes No

2) Have adequate trials of less restrictive remedies with satisfactory observance and enforcement failed to reduce the accident frequency? Yes No

3) Will the installation of a signal allow progressive traffic flow? Yes No

Warrant Satisfied? Yes No

Explanation: - Previous 5 years (2003 to 2008): 11 accident
 - Highest 12 months: 2 accident
 - Highest 12 months: 0 accident that may be correctable with a traffic

WARRANT NO.5 System Warrant

1) Are both the major and minor streets "Major Routes"? Yes No

2) Does the total Peak Hour Volume over all approaches equal or exceed 1000 vph? Yes No

3) Are one or more of Warrants 1,2,6,7 and 9 satisfied using Projected 5 Year Volumes? Yes No

4) Does the Peak 5 Hour Weekend Volume equal or exceed 1000 vph? ~~Yes~~ ~~No~~

Warrant Satisfied? Yes No

Explanation: Only Warrant 2 is satisfied for the Projected 5 Year Volumes

WARRANT NO.6 Combination Warrant

1) Have other measures been tried which cause less delay and inconvenience to traffic than traffic signals? Yes No

Number of Incoming Lanes on Approach		Large Urban Areas (> 10000 population)				Small Urban Areas (<10000 population)	
		Posted or 85th Percentile Speed				Peak 7 Hour Volume (vph)	
		=< 70 km/hr		> 70 km/hr			
Major	Minor	Major	Minor	Major	Minor	Major	Minor
1	1	600	120	420	85	420	85
2 or more	1	720	120	500	85	500	85
2 or more	2 or more	720	160	500	110	500	110
1	2 or more	600	160	420	110	420	110

Existing Scenario to be Considered			
Number of Incoming Lanes on Approach		Minimum Volumes	
Major	Minor	Major	Minor
2 or more	1	720	120

Existing Traffic Volumes (by Approach)
8 hours traffic volume on an average day

Time Period	Total of Both Major Approaches	Higher than Minimum?
6am to 7am	231	No
7am to 8am	488	No
8am to 9am	824	Yes
11am to 12am	863	Yes
12am to 1pm	937	Yes
3pm to 4pm	956	Yes
4pm to 5pm	903	Yes
5pm to 6pm	748	Yes

Existing Traffic Volumes (by Approach)
8 hours traffic volume on an average day

Time Period	Higher of Each Minor Approaches	Higher than Minimum?
6am to 7am	70	No
7am to 8am	81	No
8am to 9am	167	Yes
11am to 12am	74	No
12am to 1pm	91	No
3pm to 4pm	90	No
4pm to 5pm	72	No
5pm to 6pm	75	No

Warrant Satisfied? Yes No

Explanation: The warrant is not satisfied. Only 1 of the 8 hours traffic volume meet the minimum volumes

WARRANT NO.7 Four Hour Volumes

Location Type	Large Urban Areas (> 10000 population)	
	Posted or 85th Percentile Speed	
	=< 70 km/hr	> 70 km/hr
Rural	Figure 1	Figure 2
Large Urban (>10000 pop.)	Figure 1	Figure 2
Small Urban (<10000 pop.)	Figure 2	Figure 2

Existing Scenario to be Considered	
Location Type	Figure
Small Urban (<10000 pop.)	Figure 2

Highest of 4 consecutive hours on an average day

Time Period	Southbound	Northbound	Total of Both
2pm to 3pm	470	393	863
3pm to 4pm	492	445	937
4pm to 5pm	599	357	956
5pm to 6pm	497	406	903

Highest of 4 consecutive hours on an average day

Time Period	Eastbound	Westbound	Higher of Each
2pm to 3pm	0	74	74
3pm to 4pm	0	91	91
4pm to 5pm	0	90	90
5pm to 6pm	0	72	72

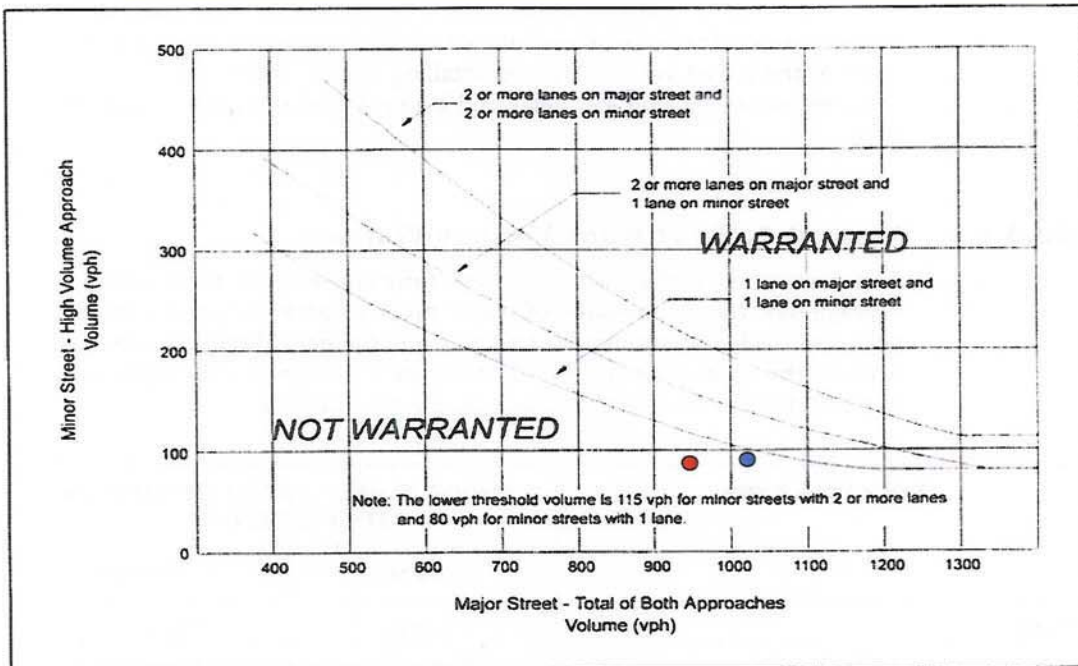


Figure 1. Warrant 7: four hour volumes 1

Warrant Satisfied? Yes No

Explanation: The red dot is for 2009 traffic volumes; the blue dot is for the projected 5 Year volumes

WARRANT NO.8 Peak Hour Delay

	Number of Minor Street Incoming Lanes on Approach with Highest Peak Hour Delay	
	1	2 or more
Minimum Peak Hour Delay (veh-hr)	4	5
Minimum Peak Hour Traffic (vph)	100	150

Number of Intersection Approaches	Minimum total Peak Hour Traffic for All Approaches Combined (vph)
3	650
4	800

Existing Scenario to be Considered	
Minimum Peak Hour Delay (veh-hr)	4
Minimum Peak Hour Traffic (vph)	100
Minimum total Peak Hour Traffic for All Approaches Combined (vph)	800

Peak hour traffic volumes on an average day

Time Period	Southbound	Northbound	Total of Both
4pm to 5pm	599	357	956

Peak hour traffic volumes on an average day

Time Period	Eastbound	Westbound	Higher of Each
4pm to 5pm	0	90	90

Existing Peak Hour Delay (veh-hr):

Eastbound:	0.00
Westbound:	0.00

Warrant Satisfied? Yes No

Explanation: The warrant is not satisfied because the minor approach does not exceed the minimum volume criteria, and existing peak hour delay for the minor approach does not exceed 4 veh-hr.

WARRANT NO.9 Peak Hour Volumes

Location Type	Large Urban Areas (> 10000 population)	
	Posted or 85th Percentile Speed	
	≤ 70 km/hr	> 70 km/hr
Rural	Figure 3	Figure 4
Large Urban (>10000 pop.)	Figure 3	Figure 4
Small Urban (<10000 pop.)	Figure 4	Figure 4

Existing Scenario to be Considered	
Location Type	Figure
Small Urban (<10000 pop.)	Figure 4

Peak hour traffic volumes on an average day

Time Period	Southbound	Northbound	Total of Both
4pm to 5pm	599	357	956

Peak hour traffic volumes on an average day

Time Period	Eastbound	Westbound	Higher of Each
4pm to 5pm	0	90	90

TRAFFIC SIGNALS

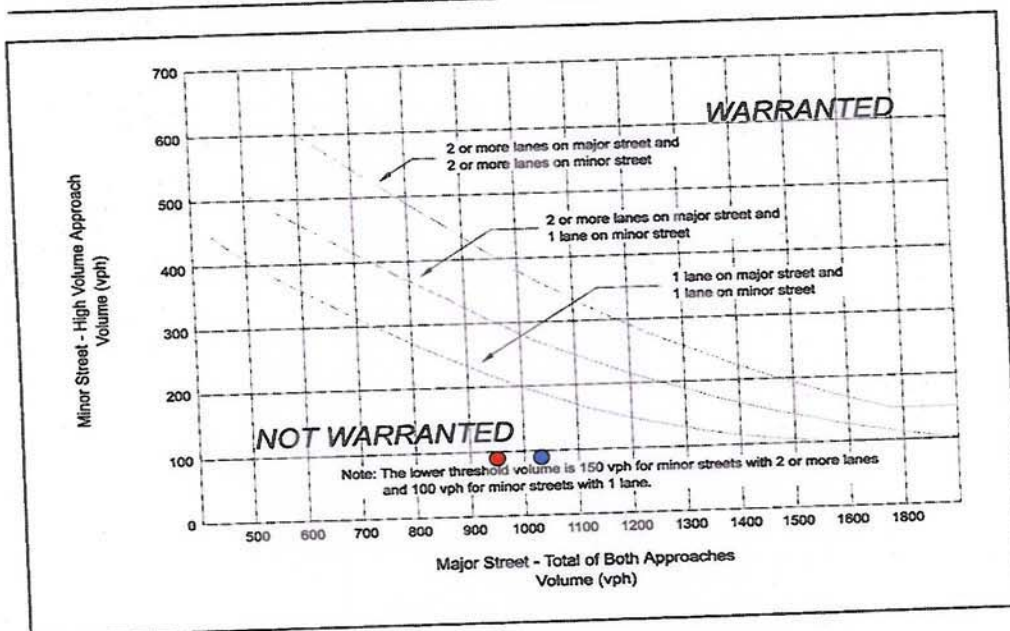


Figure 3 Warrant 9: peak hour volumes 1

Warrant Satisfied? Yes No

Explanation: The warrant is not satisfied because the peak hour volume does not exceed or equal to the required threshold.

Summary

Warrant

1) Minimum Vehicular Volume	<input type="checkbox"/> Satisfied	<input checked="" type="checkbox"/> Not Satisfied
2) Interruption of Continuous Traffic	<input type="checkbox"/> Satisfied	<input checked="" type="checkbox"/> Not Satisfied
3) Progressive Movement	<input type="checkbox"/> Satisfied	<input checked="" type="checkbox"/> Not Satisfied
4) Accident Experience	<input type="checkbox"/> Satisfied	<input checked="" type="checkbox"/> Not Satisfied
5) System Warrant	<input checked="" type="checkbox"/> Satisfied	<input type="checkbox"/> Not Satisfied
6) Combination Warrant	<input type="checkbox"/> Satisfied	<input checked="" type="checkbox"/> Not Satisfied
7) Four Hour Volume	<input type="checkbox"/> Satisfied	<input checked="" type="checkbox"/> Not Satisfied
8) Peak Hour Delay	<input type="checkbox"/> Satisfied	<input checked="" type="checkbox"/> Not Satisfied
9) Peak Hour Volume	<input type="checkbox"/> Satisfied	<input checked="" type="checkbox"/> Not Satisfied

Comments:

- This intersection does not warrant the installation of a traffic signal.
- It should be noted that the only accident data available for this site was the ICBC Claims Data provided by the City of Richmond Traffic Operation Department

Appendix B:

Parking Calculations for Commercial and Residential Uses

Commercial Parking Requirement and Supply - Up to Phase 2

		Commercial Floor Area		Parking Bylaw Requirements		Parking Supply
Broadmoor Mall	Restaurant (Phase 1)	2,635	204	Food establishment: 8 spaces per 100m ² GLA up to 350m ²	16.3	192
	Pub (Phase 1)		274	Food establishment: 8 spaces per 100m ² GLA up to 350m ²	21.9	
	Liquor Store (Phase 1)		178	Licensee Retail Store: 4 spaces per 100m ² GLA	7.1	
	Retail (Phase 1)		1,850	Retail trade & services: 3 spaces per 100m ² GLA up to 350m ² plus 4 spaces for each additional 100m ²	153.4	
	New (Phase 2)		2,247	2,071		
	<i>Sub-Total</i>	<i>4,882</i>	<i>4,576</i>		<i>198.7</i>	
Richlea Square	Existing	6,875	6,251	<i>As existing supply</i>	219	219
Petro Canada	Existing	12 fuelling stations		<i>As existing supply</i>	7	7
Total					425	418

Commercial Parking Requirement and Supply - Up to Phase 3

		Commercial Floor Area		Parking Bylaw Requirements		Parking Supply
		m ² GFA	m ² GLA	Rates	# spaces	# spaces
Broadmoor Mall	New (Phase 3)	2,273	2,053	Retail trade & services: 3 spaces per 100m ² GLA up to 350m ² plus 4 spaces for each additional 100m ²	78.6	177
	Phase 2	2,247	2,071		79.3	
	<i>Sub-Total</i>	<i>4,520</i>	<i>4,124</i>		<i>158.0</i>	
Richlea Square	Existing	6,875	6,251	<i>As existing supply</i>	219	219
Petro Canada	Existing	12 fuelling stations		<i>As existing supply</i>	7	7
Total					384.0	403

Commercial Parking Requirement and Supply - Up to Phase 4

		Commercial Floor Area		Parking Bylaw Requirements		Parking Supply
		m ² GFA	m ² GLA	Rates	# spaces	# spaces
Broadmoor Mall	Phase 3	2,273	2,053	Retail trade & services: 3 spaces per 100m ² GLA up to 350m ² plus 4 spaces for each additional 100m ²	78.6	153
	Phase 2	2,247	2,071		79.3	
	<i>Sub-Total</i>	<i>4,520</i>	<i>4,124</i>		<i>158.0</i>	
Richlea Square	New (Phase 4)	4,764	4,486	Retail trade & services: 3 spaces per 100m ² GLA up to 350m ² plus 4 spaces for each additional 100m ²	217.1	163
	New (Phase 4)	1,142	1,028			
	<i>Sub-Total</i>	<i>5,906</i>	<i>5,514</i>			
Petro Canada	Existing	12 fuelling stations		<i>As existing supply</i>	7	7
Total					382.0	323

Commercial Parking Requirement and Supply - Up to Phase 5, FINAL

		Commercial Floor Area		Parking Bylaw Requirements		Parking Supply
		m ² GFA	m ² GLA	Rates	# spaces	# spaces
Broadmoor Mall	Phase 3	2,273	2,053	Retail trade & services: 3 spaces per 100m ² GLA up to 350m ² plus 4 spaces for each additional 100m ²	78.6	149
	Phase 2	2,247	2,071		79.3	
	<i>Sub-Total</i>	<i>4,520</i>	<i>4,124</i>		<i>158.0</i>	
Richlea Square	Phase 4	4,764	4,486	Retail trade & services: 3 spaces per 100m ² GLA up to 350m ² plus 4 spaces for each additional 100m ²	217.1	163
	Phase 4	1,142	1,028			
	<i>Sub-Total</i>	<i>5,906</i>	<i>5,514</i>			
Petro Canada	New (Phase 5)	1,402	1,262	Retail trade & services: 3 spaces per 100m ² GLA up to 350m ² plus 4 spaces for each additional 100m ²	47.0	11
Total		19,981	18,484		422.0	323

Residential Parking Requirement and Supply - Up to Phase 2

		Residential	Parking Bylaw Requirements		Proposed Parking Supply	
		# units	Rates	# spaces	Rates	# spaces
Broadmoor Mall	Phase 2	64	1.5 spaces per unit + 0.2 stalls per unit for visitor parking	108.8	1.31 spaces per unit (combined)	84
Richlea Square	-	-	-		-	
Petro Canada	-	-	-		-	
Total		64		108.8		84

Residential Parking Requirement and Supply - Phase 3

		Residential	Parking Bylaw Requirements		Proposed Parking Supply	
		# units	Rates	# spaces	Rates	# spaces
Broadmoor Mall	Phase 2	64	1.5 spaces per unit + 0.2 stalls per unit for visitor parking	108.8	1.31 spaces per unit (combined)	84
	New (Phase 3)	20	1.5 spaces per unit + 0.2 stalls per unit for visitor parking	34.0	2.78 spaces per unit (combined)	50
Richlea Square	-	-	-		-	
Petro Canada	-	-	-		-	
Total		84		142.8		134

Residential Parking Requirement and Supply - Phase 4

		Residential	Parking Bylaw Requirements		Proposed Parking Supply	
		# units	Rates	# spaces	Rates	# spaces
Broadmoor Mall	Phase 2	64	1.5 spaces per unit + 0.2 stalls per unit for visitor parking	108.8	1.31 spaces per unit (combined)	84
	Phase 3	20	1.5 spaces per unit + 0.2 stalls per unit for visitor parking	34.0	2.78 spaces per unit (combined)	50
Richlea Square	New (Phase 4)	75	1.5 spaces per unit + 0.2 stalls per unit for visitor parking	127.5	1.21 spaces per unit (combined)	93
Petro Canada	-	-	-		-	
Total		159		270.3		227

Residential Parking Requirement and Supply - Phase 5, FINAL

		Residential	Parking Bylaw Requirements		Proposed Parking Supply	
		# units	Rates	# spaces	Rates	# spaces
Broadmoor Mall	Phase 2	64	1.5 spaces per unit + 0.2 stalls per unit for visitor parking	108.8	1.31 spaces per unit (combined)	84
	Phase 3	20	1.5 spaces per unit + 0.2 stalls per unit for visitor parking	34.0	2.78 spaces per unit (combined)	50
Richlea Square	Phase 4	75	1.5 spaces per unit + 0.2 stalls per unit for visitor parking	127.5	1.21 spaces per unit (combined)	93
Petro Canada	New (Phase 5)	28	1.5 spaces per unit + 0.2 stalls per unit for visitor parking	47.6	1.57 spaces per unit (combined)	44
Total		187		317.9		271



Suncor Energy Inc.
Westmount Corporate Campus
4838 Richard Road
Tel 403 767 2625
Fax 403 767 2681
www.suncor.com

January 21, 2010

Richmond City Hall
6911 No. 3 Road
Richmond, BC V6Y 2C1
Sent via E-mail: tcrowe@richmond.ca

Subject: Broadmoor Shopping Centre Master Plan Process

Dear Mr. Crowe,

This letter is to confirm Suncor Energy Inc.'s participation and cooperation in the Broadmoor Neighbourhood Service Centre Master Plan process as defined by the City of Richmond Terms of Reference dated March 20, 2009.

I understand that this is a theoretical exercise as both Richlea Square and First Capital Realty are bound by existing long term leases and Suncor Energy Inc. (Petro-Canada) plans to remain on site indefinitely.

The representatives of all have met in person and exchanged e-mail communication over the course of the planning process and I can confirm that Suncor Energy Inc. is neutral and/or in general support to the proposed Master Plan as long as it does not compromise our long term development interests.

Kind Regards,

A handwritten signature in black ink, appearing to read "Cory Innes", written over a white background.

Cory Innes
Suncor Energy Inc.
200, 4838 Richard Road SW
Calgary, Alberta
T3E 6L1

(403) 767-2625

0704477 B.C. Ltd.
Richlea Square

April 7, 2010

City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1

Sent via E-mail: tcrowe@richmond.ca

Attention: Terry Crowe

Dear Mr. Crowe,

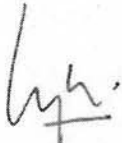
RE: BROADMOOR NEIGHBOURHOOD SERVICE CENTRE MASTER PLAN

This letter is to confirm our participation in the Broadmoor Neighbourhood Service Centre Master Plan process as defined by the City of Richmond Terms of Reference dated March 20, 2009.

We understand that the Master Plan provides the basis for future land use but each property owner's interests will be respected and there will be some flexibility in its implementation as redevelopment plans and City needs become clearer over time.

We support the April 7, 2010 Master Plan prepared by Brooke + Associates.

Yours truly,
0704477 B.C. LTD.



Elaine Leong
Director

Registered Office:
238 – 2688 Shell Road
Richmond, B.C. V6X 4E1
Tel: 604-278-3918
Fax: 604-278-3968

Please reply to:
Accounting and Administration:
301 – 2233 Burrard Street
Vancouver, B.C. V6J 3H9
Tel: 604-733-0818
Fax: 604-733-6288



**Richmond Official Community Plan Bylaw 7100,
Amendment Bylaw 8579
“Broadmoor Neighbourhood Service Centre”
(7820 Williams Road, 7980 Williams Road, 10151 No. 3 Road,
10060 Dunoon Drive and 10020 Dunoon Drive)**

The Council of the City of Richmond enacts as follows:

1. Section 2.4, COMMERCIAL, is amended by adding, after OBJECTIVE 3: the following:
 “OBJECTIVE 4: Broadmoor Neighbourhood Service (Shopping) Centre
 To establish for the Broadmoor Neighbourhood Service (Shopping) Centre, policies to guide its long-term redevelopment.

POLICIES

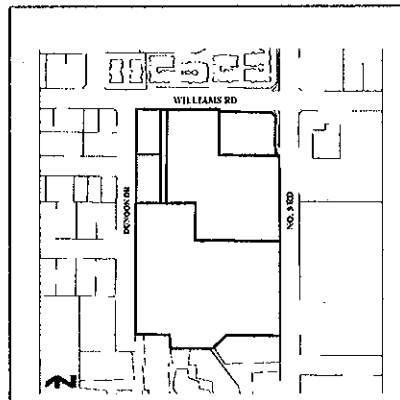
a) General:

The redevelopment of the Broadmoor Neighbourhood Service Centre is to be consistent with the OCP policies and Development Permit (DP) Guidelines. The Council approved “Broadmoor Neighbourhood Service Centre Master Plan dated April 7, 2010 has been prepared to guide Centre redevelopment. The OCP policies and DP Guidelines shall prevail, in the event of a conflict.

b) Precedence

If there is a conflict with respect to a land use designation between the OCP Generalized Land Use Map and the more specific maps referred to in this section, the more specific map designations referred to in this section shall take precedence, with the exceptions of sites designated Conservation Area or Environmentally Sensitive Areas (ESA) in which case the readers should check Schedule 1 as they take precedence over this section.

c) Broadmoor Neighbourhood Service Centre Area



d) Vision:

The long term Broadmoor Neighbourhood Service Centre Vision is: “A vibrant, accessible and sustainable mixed use hub where people will be able to live work and meet their daily needs.”

e) Flexibility

Over the anticipated 30 year redevelopment period, as the Shopping Centre redevelops, owners clarify their proposals, more specific technical studies are completed and requirements become better known, Council may modify the OCP policies and DP Guidelines, and Master Plan, as necessary.

f) Mix and Range Of Land Uses:

- Generally, the mix of land uses will be 60% residential with a variety of housing types and 40% commercial (e.g., retail and office).
- The Broadmoor Neighbourhood Service Centre land uses are to be as per the OCP Definitions (e.g., Neighbourhood Service Centres).

g) Density:

- Base: The base density will be 0.5 Floor Area Ratio (FAR).
- Maximum Density: The maximum overall density will be 1.5 FAR and minor density variations across the site may be allowed, subject to Council approval.

h) Building Height:

Generally, the maximum building height of the redeveloped Broadmoor Neighbourhood Service Centre will not exceed 6 storeys (e.g., 24.3 m [80 ft.]) and the whole Centre area is not to be redeveloped to 6 storeys (e.g., 6 storeys along the arterials, lower elsewhere).

i) Sustainability:

Broadmoor Neighbourhood Service Centre redevelopment is to incorporate sustainability features (e.g., Leadership in Energy and Environmental Design).

j) Development Permit Guidelines:

Shopping Centre redevelopment is to be consistent with the OCP Development Permit Guidelines.

k) City Infrastructure

The infrastructure to support the redevelopment of the Centre shall be as per City requirements and technical studies.

l) Financing Infrastructure

The financing of Centre infrastructure is to be primarily by developers in a variety of ways including Development Cost Charges (DCCs) (for roads, water, sanitary, drainage, parks) and other mechanisms (e.g., service agreements, latecomer charges, phased development agreements).

m) Financing Community Amenities:

- The financing of Centre community amenities (e.g., affordable housing, child care, community planning services, community beautification - above and beyond the City's standard servicing agreement requirements) is to be primarily by developers, through density bonusing, phased development agreements and other means.
- Density Bonusing: (additional density above the base 0.5 FAR) may be allowed where developers:
 - meet the Council approved Affordable Housing Strategy requirements, and
 - provide as per the approved Neighbourhood Service Centre Master Plan, a Broadmoor Community Amenity Contribution (e.g., \$2.00 per buildable square ft.) which is to be allocated as follows: \$1.00 for child care and \$0.75 for community beautification;
- Phased Development Agreements and other mechanisms (e.g., voluntary contributions) may be used to obtain funds for community planning services (e.g., \$0.25 per buildable sq. ft.);
- The provision of public art is encouraged, voluntary and where a voluntary contribution is provided, it is to be at \$0.60 per buildable square foot;
- Other amenities, as may be determined by Council.

2. Section 9.0 DEVELOPMENT PERMIT GUIDELINES is hereby amended by adding after Section 9.8 MARINA GUIDELINES, the following:

“Section 9.9 BROADMOOR NEIGHBOURHOOD SERVICE CENTRE GUIDELINES

The intent is to enhance the design, character and function of the Broadmoor Neighbourhood Service Centre.

9.9.1. General

Redevelopment in the Broadmoor Neighbourhood Service Centre shall meet all applicable OCP design guidelines.

9.9.2. Specific

The following supplementary design guidelines shall apply to redevelopment in the Broadmoor Neighbourhood Service Centre and should take precedence over the more general OCP guidelines:

9.9.3 Centre Vision

Vision for the Broadmoor Neighbourhood Service Centre

The guidelines will contribute to the Centre Vision which is:

“A vibrant, accessible and sustainable mixed use hub where people will be able to live work and meet their daily needs.”

The Neighbourhood Service Centre is envisioned to become:

- a vibrant, compact mixed used hub with a mix of housing, shops and services;
- the “heart” of Broadmoor where people will be able to live, work, and meet their daily needs;
- pedestrian oriented with public spaces where people can meet and pedestrian paths that link to adjacent neighbourhoods and parks; and
- and will reflect the principles of sustainability with a contemporary design that integrates durable and natural materials.

9.9.4 Form and Character

In the Master Plan concept, buildings are arranged to create a functional commercial node with a more urban character and respond appropriately to the adjacent neighbourhood context. Buildings vary in height from two to six storeys and contain a variety of commercial spaces and residential units.

- the Master Plan area exemplifies a sustainable, durable and contemporary design character;
- buildings are placed along the perimeter of the site, close to the property line along No. 3 Road and Williams Road to reinforce building frontage continuity, especially along No. 3 Road;
- large open surface parking areas to be partially screened from direct views from the street (using a combination of landscaping and lattice/arbours structures);
- building frontage building heights vary between 2 and 6 storeys;
- density is greatest along the main arterial of No. 3 Road and the northeast corner of the site at Williams and No. 3 Road, where a public urban space and architectural features would establish a landmark at this neighbourhood intersection and key gateway;
- residential units are located above commercial uses and townhouse forms are at ground level when adjacent to existing residential areas;
- residential units above commercial uses along No. 3 Road and Williams Road to be setback from the edge of the commercial/parking floors so that the streetwall is perceived to be not higher than 4-storeys;
- buildings of various heights and massing create identifiable nodes and interest, particularly along No. 3 and Williams;

- commercial retail units (CRU's) at ground floor to have direct pedestrian access from the public sidewalk;
- decorative pavement to extend from public sidewalk to the building face where there is no substantial grade difference;
- building facades are animated by views into active retail space;
- if no fenestrations provided, housing forms wrap around otherwise blank edges of internally oriented commercially space;
- an identifiable mass and/or landscaping feature will be created at the entrance to Dunoon by incorporating a feature "ending" to the last and northerly townhouse block on the Williams Road portion;
- there will be residential units suitable for all family types, including opportunities for ground-oriented housing, and upper level apartment/condominiums with access to useable roof space;
- where the street frontage is comprised of residential development at grade (e.g. along Dunoon), buildings will:
 - have their major entries onto Dunoon or the perimeter of a privately-owned publicly accessible areas;
 - be developed with entry transitions and semi-private outdoor spaces; and
 - will include steps and changes in grade, fences, gates, low walls, hedges and other plantings.
- where buildings are located immediately adjacent to existing residential areas, upper storeys are stepped back to reduce overlook concerns and minimize massing;
- residential windows and balconies overlook common areas and public streets, providing "eyes on the street";
- ground-oriented commercial units front internal surface parking areas, front No. 3 Road and portions of Williams Road providing an active streetscape with direct pedestrian access from the street sidewalk;
- large buildings blocks are architecturally broken down into an expression of smaller street-fronting retail with varied frontages;
- building and landscape design at the corner of Williams and No. 3 Road is distinctive and welcoming;
- continuous weather protection is provided along commercial building frontages in the form of relatively continuous canopies and awnings;
- commercial units provide proportional and abundant glazing at street level to contribute to an active and interesting streetscape;
- there will be no extensive blank walls or obscured windows along the street frontage, at grade or on upper levels;
- streetscapes (defined by building heights and setbacks, sidewalk and landscaping) are consistent with a more urban overall character and compatible with the general character of the master plan area, and are complementary to the existing neighbourhood context;
- terracing and building setbacks on upper levels of taller (over 4 storeys) street-wall buildings are employed to create interest, improve access to light and to reduce bulk;
- height and massing are varied on street buildings to create a diverse and well-articulated shopping area;
- building articulation, glazing and a variety of materials are used to prevent long, featureless facades;

- awnings and overhangs provide shade in the summer and weather protection along pedestrian routes, at the entrances of shops and residences;
- materials, colours and elements such as light standards, benches, fences and trash receptacles, contribute to a sustainable, durable, contemporary design character;
- local and sustainable products are used wherever possible (e.g., wood, recycled or renewable materials).

9.9.5 Flood Plain Construction Levels

- Protruding retaining walls necessary to meet flood elevation levels are screened from view with landscape planting or banks (Note: for direction on treatment of road frontages, Section 2.10.2 (a) “Attractive, Accessible Street Frontages, pages 2-116 and 2-117 of the City Centre Master Plan (CCAP) will be referred to. See pages 3-29 and 3-30 of the CCAP for direction on concealing parking below grade).

9.9.6 Key Gateways, Neighbourhood Nodes and Pedestrian Corridors

To create a Neighbourhood Service Centre that invites and welcomes the community, a series of pedestrian connections, neighbourhood nodes and gateways have been defined. As shown on the Master Plan, two landmark gateways are identified: one at the key access to the commercial centre from No 3 Road and the second anchoring the corner at the intersection of Williams Road and No. 3 Road. One neighbourhood node (A) provides an internal gathering and heart for the Service Centre and a second neighbourhood node (B) serves as the key pedestrian access from Dunoon.

The neighbourhood node (A) internal to the site is situated near the centre of Master Plan area. The node is well connected by pedestrian corridors to help to achieve seamless integration with the adjacent neighbourhood. The central node also serves to organize the interior parking area into two smaller parking clusters and is large enough that it could include a light retail/structure (e.g., coffee, convenience kiosk, floral cart)

Four vehicle entries and various pedestrian corridors are identified in the Master Plan. Pedestrian routes run through the site and become an extension of the adjacent neighbourhood circulation network through the Neighbourhood Service Centre and link to the city sidewalks along its periphery.

9.9.7 General Principles

- the Master Plan area is permeable, safe, welcoming and accessible to people of all ages and abilities;
- prominent corners and entry points are designed as gateways that identify access points to the commercial area and routes into the neighbourhood;
- a neighbourhood node internal to the site is designed as a place to gather and interact with residents and visitors;
- the Broadmoor Master Plan identifies primary and secondary pedestrian corridors through the site and into the neighbourhood to connect to the surrounding neighbourhoods and Maple Lane Park;

- the pedestrian routes are direct, universally accessible and can accommodate a range of uses (e.g., wheelchairs and strollers).
- sidewalks and pedestrian corridors are well-defined through a combination of surfaces, landscape features and human-scale lighting;
- transit stops are visible and easily accessible by pedestrians and cyclists;
- buildings adjacent to transit stops integrate transit shelters into building and/or urban design with weather protection (e.g., awnings, overhangs and spaces for waiting);
- stairs and ramps are provided to access above grade entrances to residential and commercial units from the public realm;
- elements such as lamp standards, benches, fences and trash receptacles within the public realm are consistent in design and contribute to a sustainable, durable, contemporary design character;
- trees and other landscape features contribute to an attractive and comfortable public realm;
- trees, shrubs and appropriate landscaping frame pedestrian routes, reinforce the alignment of the pedestrian corridors through the site and add colour, texture and interest around the site;
- seating (seating walls or benches integrated to planters, or other) are provided along all pedestrian routes and in the central neighbourhood node;
- primary pedestrian corridor routes through the Master Plan area will be identifiable by pavement colour and texture, and will be separated, where feasible, from parking areas, and driveways;
- public art will contribute to the overall character and vibrancy of the service centre.

9.9.8 Gateways & Neighbourhood Nodes

There are two landmark gateways and two neighbourhood nodes envisioned for the Master Plan area. These serve as a welcome to the service centre and provide an opportunity for social interaction or seating. They are envisioned to enhance the quality of the urban environment for the benefit of land owners, tenants and residents. Key features of each gateway and node are identified below.

Williams and No. 3 Road Gateway

- the gateway at Williams and No. 3 Road will integrate an identifiable landmark feature consistent with the general character of the Master Plan, which could include a unique building design or landscape feature;
- the gateway will integrate site signage that identifies the service centre and provides directional information to key focal points in the community or at the service centre;
- the gateway functions as the welcome to the 'heart' of Broadmoor;

No 3 Road (south) Gateway

- this gateway provides the primary vehicle access and pedestrian corridor to the service centre from No. 3 Road; the primary pedestrian corridor extends further to the east and provides access to the adjacent neighbourhood from No. 3 Road;
- this gateway will be designed to open up the entrance to the shopping area (to views) from No. 3 Road and highlight the beginning of the main pedestrian route and connection to Dunoon Drive and Petts through the neighbourhood center;
- integration of all modes of transportation, safe and accessible design are the primary organizing principles for the design of this gateway;

- the gateway will be predominantly hardscape complimented by vegetation and corner architectural feature on adjacent buildings;
- opportunities for gathering and informal interaction through the integration of landscape or architectural elements should be explored;
- the gateway will integrate site signage that provides directional information to key focal points at the service centre;

Central Plaza Node (A)

- at the centre of the service centre this node is also an anchor associated with the neighbourhood and is 800 m² in size;
- is internal to the site and it is the organizing space within the central surface parking area;
- provides a central space/structure as a node in the middle of the central parking area to break the extent of paved parking surfaces into two smaller, friendlier parking clusters and organizes the parking area vehicular circulation;
- contains a distinguishable feature such as a light structure retail/kiosk and associated plaza with seating, designed to facilitate gathering as well as green landscaped areas to create a buffer to the surrounding parking areas and vehicular circulation;
- will include benches, waste receptacles and could be the place for a public art piece as a tall vertical element that serves as a landmark that identifies the service centre.

Dunoon Drive Node (B)

- located along Dunoon Drive across from Petts Drive, this space identifies the western entrance to the Primary Pedestrian Corridor to No. 3 Road through the neighbourhood service centre;
- encourages pedestrian connectivity between Maple Lane Park and the service centre, and offers a key connection between park/neighbourhood and No. 3 Road;
- establish a break along the continuous built frontage along Dunoon Drive and is 800 m² in size;
- adjacent buildings will be designed to ensure good access to sunlight and will front onto this area;
- reinforce safety by implementing “eyes on the street” principles with clear overlook from any adjacent commercial or residential buildings, with individual residential units oriented towards and having direct access to the open space; where possible individual front doors should open along the gateway edge sidewalks;
- signage provides directional information and identifies the service centre;
- benches, lighting and waste receptacles are provided.

9.9.9 Primary Pedestrian Corridors

No. 3 Road to Dunoon Drive E-W Pedestrian Corridor

- a centrally located, landscaped pedestrian spine that extends parallel to the vehicular access route and provides a direct connection from No 3 Road to Dunoon Drive and Petts;
- includes decorative pavement and a double row of trees to highlight the east-west primary pedestrian corridors through the Master Plan area;
- will include a 2.5 m wide paved path with a 1.5 m wide boulevard for tree, shrubs or other vegetation on each side;

- integrate coloured pavement (contrasting with asphalt on parking/drive aisles) and pedestrian scale lighting;
- integrate paved bump-outs with landscape features and seating areas along the drive aisle of this corridor, if feasible integrate parallel parking or another design solution to ensure pedestrian feel protected from the drive aisle at this edge;
- ensure a vertical element (signage, gateway feature) is provided at the termini (No 3 Road (south) and Gateway B discussed above) to draw people through the corridor;
- should be designed to be durable and include shade trees.

E-W Access Pedestrian Corridor

- this is a primary pedestrian corridor to the internal neighbourhood node (A) from the northern access on No. 3 Road, and links to the internal north-south pedestrian corridor network;
- the corridor will be a paved 2.5 metre wide sidewalk allowing a 1.5 metre wide boulevard for trees, trees grates and seating along the edge of the commercial parking areas;
- the corridor will extend along the internal storefronts or active building facades and will include raised crossings where vehicles cross its path.

N-S Internal Pedestrian Corridor

- provides a direct internal corridor between Williams and the two main E-W Primary Pedestrian Corridors connecting through the site with the internal commercial services;
- includes decorative or coloured pavement and a row of trees to highlight the north-south primary pedestrian corridors through the Master Plan area;
- is located along commercial frontages to the east of the development, where possible, and connects Williams to the internal node and the two east-west pedestrian corridors;
- facilitates the integration of the service centre with the pedestrian network and connecting to surrounding residential areas;
- provides pedestrian scale lighting, signage, waste receptacles and seating along the pathway.

N-S Pedestrian Corridor on Dunoon from Petts to Maple Lane Park

- a enhanced pedestrian realm is desirable to extend along Dunoon from the Dunoon Drive node at Petts to the south portion of the master plan area to highlight and reinforce the linkage to Maple Lane Park;
- integrates with Maple Lane Park by incorporating strong and well identifiable public use pedestrian corridor along Dunoon, toward Maple Lane Park;
- encourage linkages to Maple Lane Park and Petts Roads so that residents can easily access the service centre via pedestrian friendly corridors rather than through parking and loading driveways, or by using the car;
- facilitate and allow views to the site that can be seen from Maple Lane Park; therefore providing a highly integrated pedestrian corridor connected with two gateways to access the shopping area, from Dunoon and the southern portion of the site.

Secondary Pedestrian Corridors

- these corridors are extensions of the Primary Pedestrian Corridors and complete the pedestrian circulation network. They extend along the internal and external frontage of the residential and commercial buildings and include City sidewalks along the periphery if not identified on the Master Plan concept.

- pedestrian crossings will be enhanced to be safe and highly visible at No. 3 Road and Williams Road to facilitate strong linkages to the Service Centre and to the surrounding neighbourhood to the north and east.

9.9.10 Integration with Maple Lane Park

The Broadmoor Neighbourhood Service Centre will:

- integrate with Maple Lane Park by incorporating public use pedestrian corridors and extending walkways through the shopping area and open spaces to the south along Dunoon Drive, toward Maple Lane Park;
- provide linkages to Maple Lane Park and Nevis and Pett Roads so that residents can access the shopping area via pedestrian friendly corridors rather than through parking and loading driveways.

9.9.11 Parking, Loading and Access

Surface parking is limited to convenience parking for retail shops, while most commercial and residential parking is located within the building envelope on the first or second level.

The Broadmoor Neighbourhood Service Centre will:

- provide parking organized in small clusters, contain the parking areas within the centre of the site and minimize the amount of exposed surface parking;
- surface parking exposed to views along Williams Road frontage will be partially screened from views (incorporating a combination of landscaping, low lattice fence (4 ft.) and trellis/arbours structure);
- provide a balanced supply of parking that meets the residential and commercial needs of the development, while supporting and encouraging alternative modes of transportation;
- provide ways for commercial loading and service vehicles to enter and exit the shopping area from No. 3 Road and Williams Road and ultimately not from Dunoon;
- utilize trees and landscaping to separate sidewalks from parking areas to protect people from vehicle traffic and create a pleasant pedestrian zone;
- provide clusters of small car parking spaces combined with full size parking spaces to introduce landscaping islands with trees and other appropriate vegetation to facilitate natural drainage in the parking area, and to provide shade and visual relief of the parking surface;
- bicycle parking facilities are provided at all residential and commercial building entrances;
- when vehicle parking is located within a building, the parking structure will be screened from view, either by wrapping the parking with residential or commercial units, or through the use of architectural features such as louvers;
- loading areas integrated as part of the building(s) provided with appropriate visual screens and/or gates;
- parking lots and structures are well lit and designed according to CPTED principles;
- surface parking lots are landscaped with trees; and
- parking areas, building entrances, sidewalks and public spaces are designed to be safe and accessible to people of all ages and abilities.

9.9.11 Green Buildings and Sustainable Infrastructure

The Broadmoor Service Centre developments will incorporate innovative approaches for green infrastructure and green buildings. Developments will flexibly achieve comprehensive green

building and infrastructure strategies that address on-site rainwater management, energy efficiency and renewable energy production, potable water conservation and waste minimization.

At the minimum, the buildings in the development will meet By-law No. 8385, "Green Roofs and Other Options Involving Industrial and Office Buildings Outside the City Centre". Other approaches to green buildings will be considered such as those required in the City Centre Area Plan (e.g., LEED rating system and credits), or LEED Silver Certification or equivalency.

The Broadmoor Service Centre will design buildings and site infrastructure that:

- minimize the use of energy and reduce Greenhouse Gas Emissions;
- use less potable water;
- use resources efficiently and incorporate sustainable building materials;
- mitigate, manage, and clean as much rainwater onsite as possible;
- reduce the generation of waste through careful design and construction practices;
- incorporate ways to improve indoor air quality, noise, noxious emissions and dust; and
- consider opportunities for urban agriculture on the site.

3. This Bylaw is cited as "Richmond Official Community Plan Bylaw 7100, Amendment Bylaw 8579".

FIRST READING

PUBLIC HEARING WAS HELD ON:

SECOND READING

THIRD READING

ADOPTED

MAYOR

APR 26 2010

CORPORATE OFFICER

