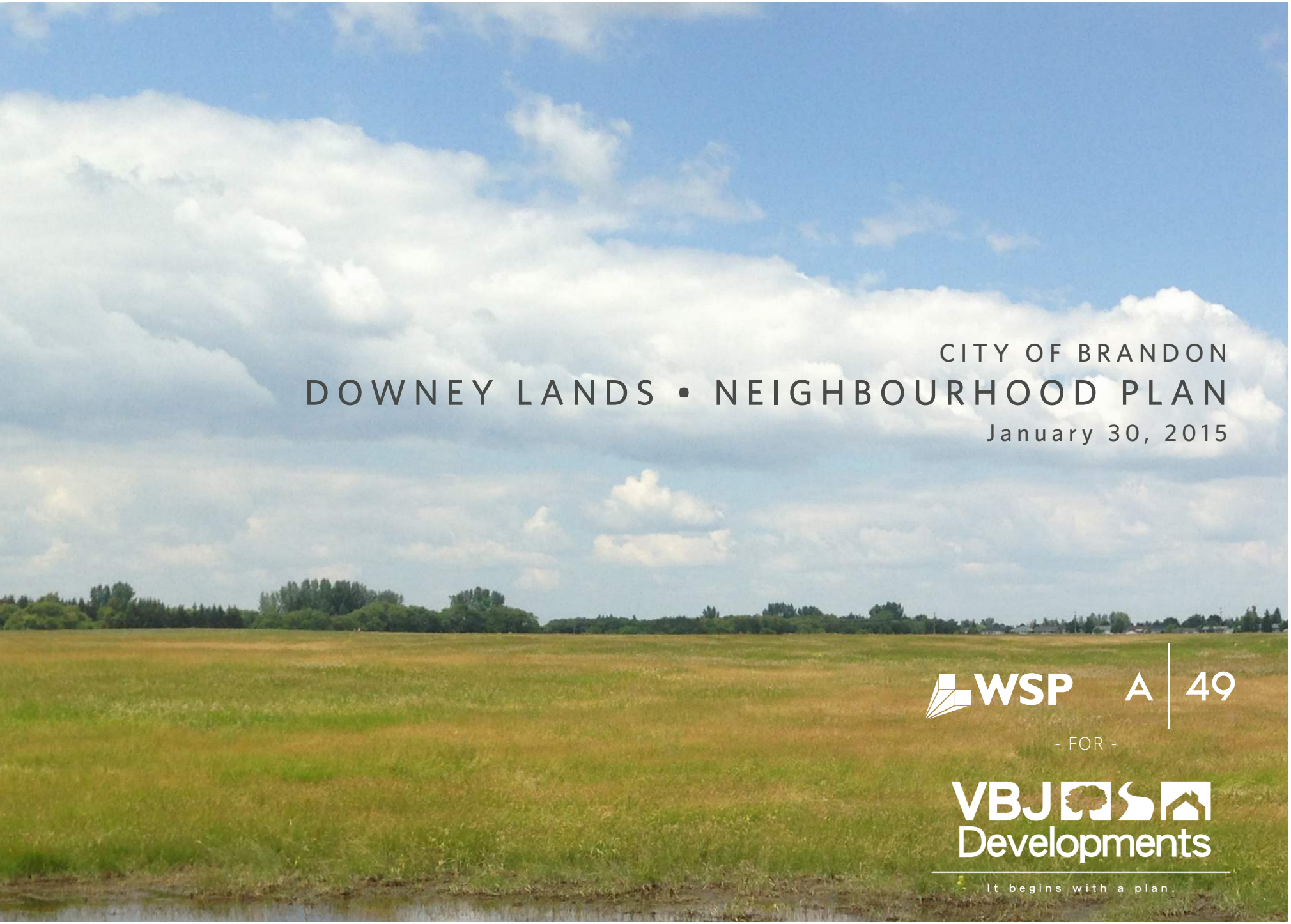


CITY OF BRANDON

DOWNEY LANDS • NEIGHBOURHOOD PLAN

January 30, 2015

WSP | A | 49

- FOR -

VBJ Developments

It begins with a plan.

Table of Contents

SUPPORTING DOCUMENTS UNDER SEPARATE COVER*

Municipal Servicing Overview (draft submitted)

Traffic Impact Study (draft submitted)

Financial Impact Statement: (City to prepare)

*Status as of January 2015

1.0 Development Overview

This Neighbourhood Plan has been prepared in general accordance with the policies contained within Section 6.3 of the Southwest Brandon Secondary Plan, By-law No. 7080. The plan covers the 64.8 ha. (160 acre) quarter section of land (plan area) bounded by Maryland Avenue on the north, the unimproved 26th Street ROW on the east, Patricia Avenue on the south, and 34th Street on the west. The plan area is designated Residential under the Brandon Area Development Plan and zoned Agriculture under the City of Brandon Zoning By-law No. 6642. The quarter-section covered by the Neighbourhood Plan was annexed by the City of Brandon from the RM of Cornwallis in 2012. As the principal owner and land developer, VBJ Developments Ltd. (VBJ) was assigned the responsibility for preparing this Neighbourhood Plan by the City of Brandon as a prerequisite for urban development. Supporting documentation for the plan includes a Municipal Servicing Overview, a Traffic Impact Study and a Financial Impact Assessment. The Municipal Servicing Overview and Traffic Impact Study are being submitted to the City under separate cover. The City is having the Financial Impact Assessment prepared independently.

As called for by the SW Brandon Secondary Plan, the Neighbourhood Plan is designed to create a walkable, mixed housing neighbourhood with good street and trail connections to adjacent areas. The focal point of the neighbourhood is a land drainage lake and trail system that interconnects a variety of active and passive recreational facilities and links the neighbourhood to the surrounding area.

The plan provides parcels for moderate density, multi-family development at strategic locations within the neighbourhood close to the arterial street system, trail system and transit routes. The Neighbourhood Plan shows, conceptually, a shadow plan for installing local streets to facilitate development of the private land holdings fronting the east side of 34th Street. The local streets provide an alternative to direct access onto 34th Street via commercial approaches or service roads.

With the potential for mixed-use development on private lands at the NE corner of 34th Street and Patricia Avenue, the Neighbourhood Plan provides opportunities for all of the land uses proposed for the area by the SW Brandon Secondary Plan. In total, the Neighbourhood Plan has the potential for accommodating upwards of 3,000 residents in 1,300 housing units of all types at a moderate density of development.

IMAGE: LOOKING NORTH FROM PATRICIA

2.0 Area Context

NORTH

The Neighbourhood Plan area is bordered on the north by the Parkdale Heights residential neighbourhood which contains approximately 10 hectares (25 acres) of developable land (gross area) that falls within the Secondary Plan boundary but outside of the Neighbourhood Plan area. As shown on Figure 1, the developable land lies to the north of the plan area across the unimproved section of Maryland Avenue west of Marquis Drive. The land is under 10 different ownerships including the City of Brandon which controls street rights-of-way that were part of an obsolete plan of subdivision covering the southerly 8 hectares (20 acres) of the area. Existing development includes seven (7) single-family dwellings with driveway approaches onto 34th Street. Options for accessing these lands include 34th Street, Shaw Avenue (unimproved), Prelude Bay (southerly extension of west leg), and Maryland Avenue (westerly extension to 34th Street). The land was previously farmed and is largely cleared with the exception of shelterbelts, treed residential lots, and a small woodlot on the north side of the future Maryland extension. Drainage is overland with much of the run-off collecting in a slough contained within the woodlot.

EAST

The plan area is bounded on the east by 26th Street which exists as a sub-standard 10.0 metre (33-foot) ROW abutting the north-south quarter-section line running between Maryland and Patricia avenues. The north half of the ROW contains a gravel road that provides access to the Christian Heritage (private) School and two (2) private residences. The road also provides informal access to the Brentwood Trailer Court. The trailer court and the school are the principal developments bordering the east limit of the plan area. The Secondary Plan boundary includes the lands to the east of 26th Street north of the trailer court, spanning approximately 16.8 hectares (42 acres) in four (4) separate titles. Of this gross area, approximately 10 ha. (25 acres) is available for future development with access from Maryland Avenue and 26th Street.

SOUTH

Patricia Avenue abuts the plan area on the south and is the boundary road between the City of Brandon and the RM of Cornwallis. The quarter section in the RM to the south of the plan area is largely in agricultural use with limited development including a private residence and a garden centre and landscape business. Patricia Avenue is a 2-lane paved roadway with ditch drainage from PTH #10 (18th Street) west to the main entry to the Brentwood Trailer Court and gravel thereafter.

WEST

The quarter-section to the west of the subject neighbourhood also falls within the SW Brandon Secondary Plan area and is slated for staged residential development involving the southerly extension of the Brookwood residential development west of 34th Street and south of Richmond Avenue. The major collector street serving Brookwood is Lakeview Drive, which is shown in the Secondary Plan as crossing 34th Street to connect to the east-west collector street in the subject Neighbourhood Plan Area.

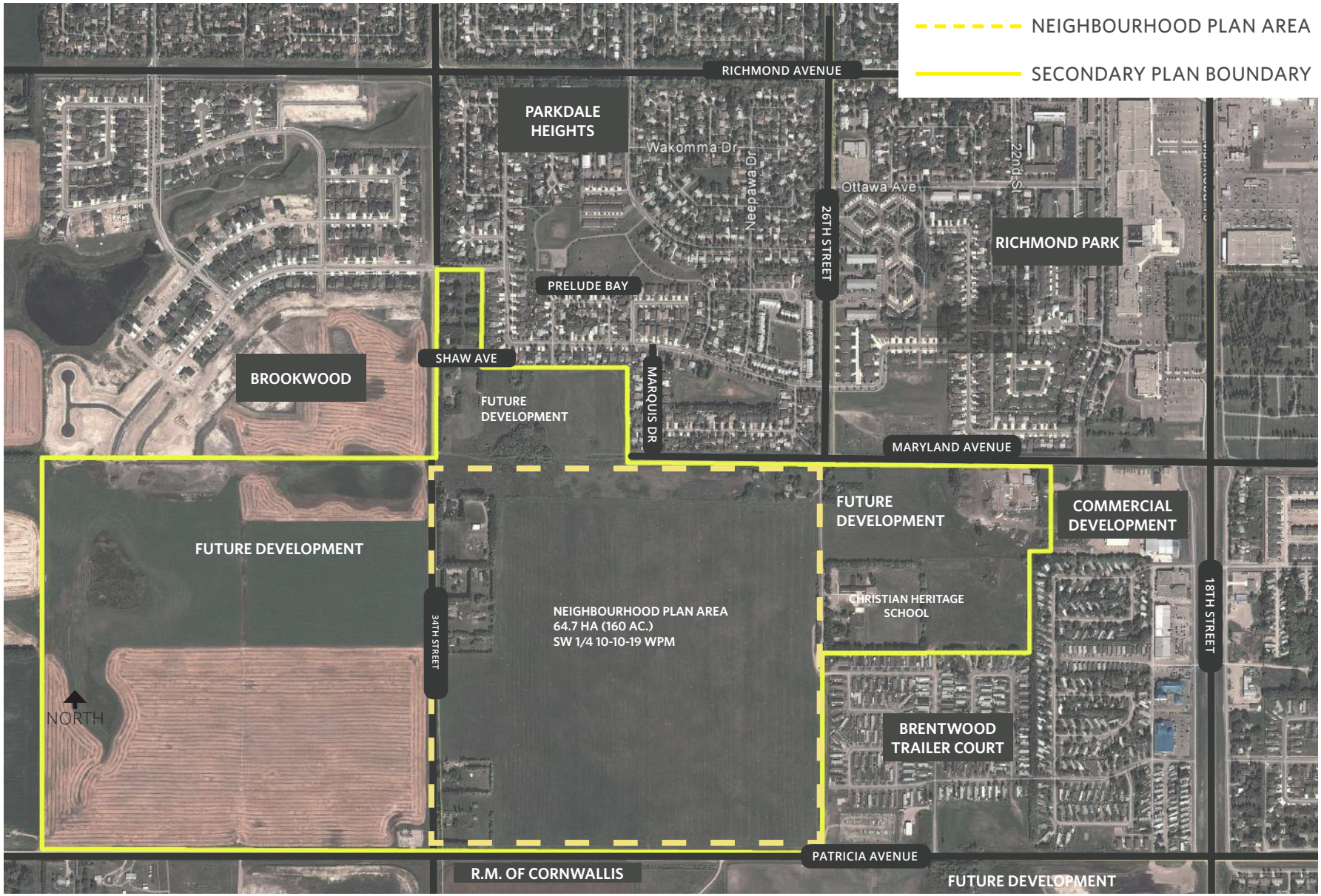


FIGURE 1: PLAN AREA IN THE CONTEXT OF THE LARGER CITY AND ADJOINING RM OF CORNWALLIS.

3.0 Site Description

Key characteristics of the plan area are described in the following paragraphs.

EXISTING PROPERTY OWNERSHIP

Figure 2 shows parcel boundaries within the Neighbourhood Plan area at the time of writing (Parcels A to K). The plan area covers the entire SW Quarter-Section 10-10-19 WPM, spanning 65 ha. (160 ac.) divided amongst eleven (11) property titles. A majority of the land (55 ha.; 136 ac.) is owned by VBJ under two titles, Parcels I and J. The balance of the land (9.7 ha.; 24 ac.) is distributed amongst 9 titles owned by private individuals, of which eight (8) contain single-family residences with driveway access from 34th Street. Apart from the hydro lines on the VBJ lands, boundary streets are unencumbered by utility easements.

SITE CHARACTERISTICS

The plan area is gently undulating with a gradual slope from north to south from a high elevation of 405 metres (1,329 ft.) ASL in the northwest portion of the quarter-section to 400 metres (1,312 ft.) ASL in the southeast corner, a drop of 5 metres (16.4 feet). Drainage is overland to the Patricia Avenue ditch, with a majority of the runoff ending up in the slough located on lands owned by VBJ at the SW corner of the Patricia/PTH #10 intersection. Treed vegetation consists of shelter belts around the private dwellings and the southern tip of a woodlot bisected by the Maryland Avenue ROW at the NW corner of the plan area. The larger of the VBJ parcels (Parcel J on Figure 2) is currently being cropped, while the smaller parcel (Parcel I) adjacent to Maryland Avenue lies fallow.

SOILS AND GROUND WATER:

The subsurface stratigraphy in the area of Brandon including the plan area can be expected to consist of topsoil and/or fill materials followed by deltaic deposits of sand, gravel and clay underlain predominately by a clay till extending to shale bedrock. The drift thickness varies throughout the area, although generally is of significant thickness (greater than 60 m).

Bore logs were obtained from three (3) drill sites within the plan area. The locations and soil profiles are as follows:

1. West of Marquis & Maryland: 1ft of topsoil with another 9ft of stiff silty brown clay; water seepage was apparent at the bottom of the 10ft hole.
2. Location of old Barn: 1ft of topsoil; 9ft of stiff silty brown clay; no water seepage in bottom of either hole.
3. Location halfway between Barn and Marquis locations: 1ft of topsoil; 9ft of stiff silty brown clay; no water seepage in bottom of either hole.

Sand and gravel deposits within and above the till generally comprise a significant, although only marginally utilized aquifer. Using the Manitoba Department of Water Resources criteria, if significant contamination were present in the area as a result of past or current activities, the potential for groundwater contamination would be moderate.
Groundwater from the site generally flows overland and via tributaries southward and eventually eastward to the Assiniboine River.

Sources: Surficial Geological Map of Manitoba (Map 81-1, Manitoba Department of Natural Resources, 1978), the Manitoba Soils Survey (Report No. 6, 1956), Sand and Gravel Resources of the Brandon Region (The UMA Group, 1977) and AMEC's experience in this area.

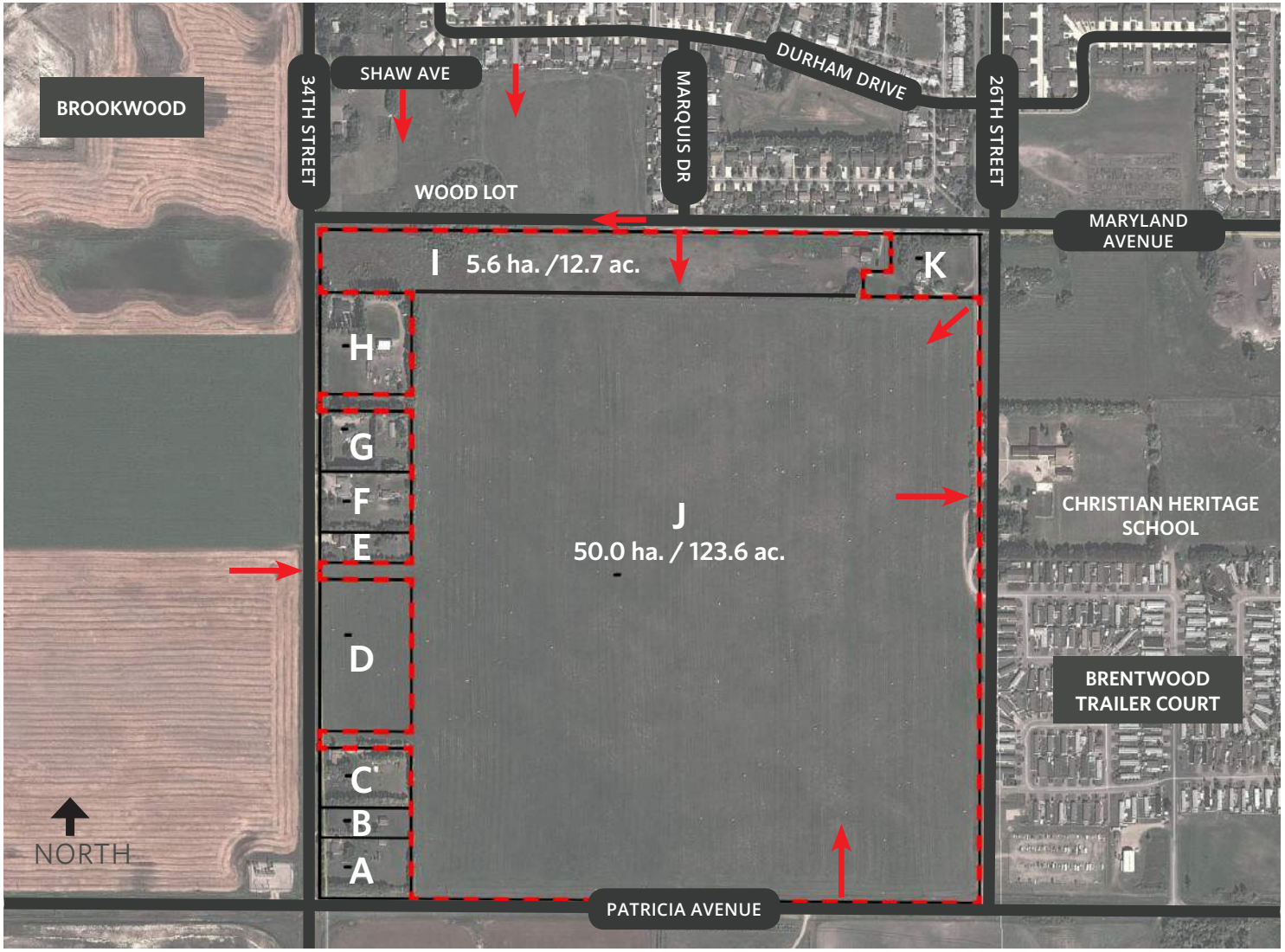


FIGURE 2: PARCEL PLAN

→ ACCESS POINTS

- - - VBJ LANDS

4.0 Neighbourhood Plan

The Neighbourhood Plan is illustrated in Figure 3. The plan is designed to conform to the Southwest Brandon Secondary Plan (By-Law No. 7080). The Secondary Plan sets out the broad development parameters and guidelines for the Neighbourhood Plan in terms of land use, sewer and water servicing, land drainage, streets and Active Transportation (AT) connectivity and parks and natural areas. The proposed Neighbourhood Plan adheres to the spirit and intent of the Secondary Plan and implements the plan's essential elements as described in the following paragraphs.

4.1 LAND USE

In accordance with the Secondary Plan, the Neighbourhood Plan provides for a range of housing densities and types. Figure 3 identifies these areas as Residential Low Density and Residential Moderate Density. With reference to the City of Brandon Zoning By-Law, the areas shaded to indicate Residential Low Density includes detached dwellings under the Residential Single Family (RSF) zoning category, and multiple-family dwellings under the Residential Low Density Multiple Family (RLD) zoning category. Parcels shaded Residential Moderate Density on Figure 3 fall under the Residential Moderate Density Multiple Family (RMD) zoning category.

The Secondary Plan sets out target densities ranging from 15 to 40 units per hectare (6 to 16 units per acre) for Residential Low Density (RLD) housing, and 41 to 86 units per hectare (16.5 to 34.8 units per acre) for Residential Moderate Density (RMD) housing.

At full build-out, the housing and population yields will fall within the ranges prescribed in the Secondary Plan. The precise block or parcel zoning and resulting densities will be determined at the time of subdivision approval, at which point the following zoning categories will apply.

RESIDENTIAL ZONING & HOUSING TYPES

- Residential Single-Family (RSF): Within the plan area, typical lots for single-family dwellings will have widths ranging from 12.2 to 15.2 metres (40 to 50 feet), and depths ranging from 30.5 to 36.5 metres (100 to 120 feet).
- Residential Low Density (RLD): Within the plan area, low density multiple-family housing consisting of semi-detached dwellings, duplexes, 3-plexes, 4-plexes and row housing will be integrated into the development on a block-by-block basis in response to market demand.
- Residential Moderate Density (RMD): Within the plan area, 8.44 hectares (20.98 acres) of land is contained in parcels slated for higher density town houses, cluster town houses and 3-4 storey apartment buildings. The RMD parcels are shadow-planned to allow for their conversion to RSF and RLD development depending upon market demand.

MIXED USE

The Secondary Plan identifies a Mixed Use (MU) node at the northwest corner of Patricia Avenue and 34th Street as identified in Figure 3. This node is conceptually located in the Secondary

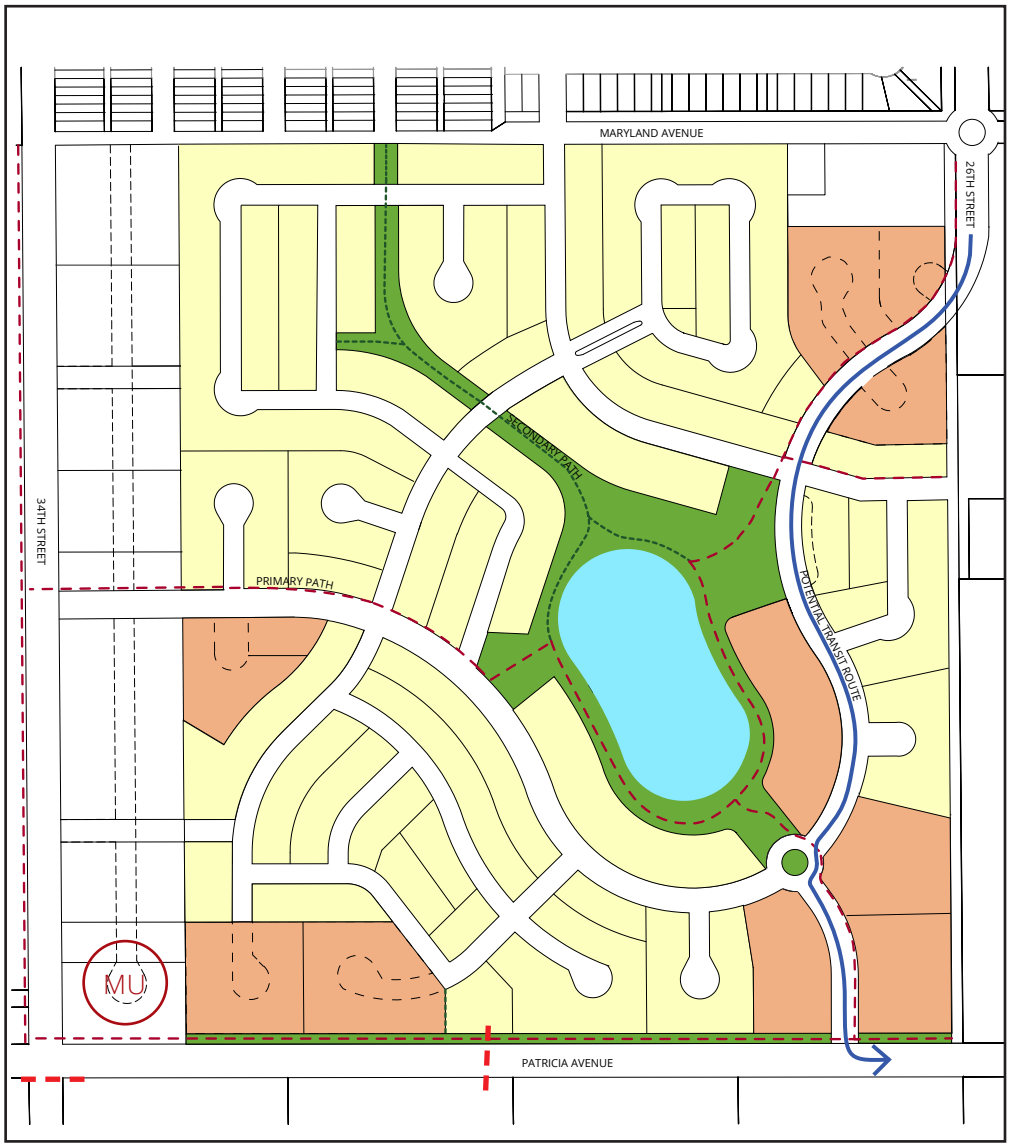


FIGURE 3: NEIGHBOURHOOD PLAN

PRIMARY PATH

SECONDARY PATH

MU POSSIBLE FUTURE MIXED USE NODE

TABLE 1: LAND USE BREAKDOWN

LANDUSE	HECTARES*	ACRES *	PERCENTAGE*
RESIDENTIAL LOW DENSITY	26.40	65.24	48.6 %
RESIDENTIAL MODERATE DENSITY	8.67	21.42	16.0%
PARKS & RECREATION	4.75	11.73	8.7`%
STORMWATER IMPOUNDMENT	2.47	6.10	4.5 %
ROADS	11.99	29.62	22.2 %
TOTAL PLAN AREA	**54.28**	**134.12**	**100.0 %**
*** APPROXIMATE**			

Plan on a parcel that currently contains a private residence. The Neighbourhood Plan locates a Residential Moderate Density (RMD) parcel immediately east of the potential MU site. The Neighbourhood Plan proponent has no direct control over the possible future development of a Mixed Use node in the location proposed by the Secondary Plan. However, given the potential prominence of the intersection as development expands southward along 34th Street, a number of higher density, multi-use development scenarios for a mixed use node in this location are conceivable. And while it is premature to speculate as to how future development on the adjoining parcels could or should be integrated (or buffered), the Secondary Plan provides some guidance on the development of mixed use nodes under section 2.2.

TRAFFIC ACCESS

As proposed under the Secondary Plan, the Neighbourhood Plan area is serviced by a collector street system that loops through the neighbourhood to provide the following primary, inter-community connection points:

- 34th Street: The neighbourhood collector street connects to 34th Street on an alignment that will enable it to serve as a continuation of the Lakeview Drive collector that is being constructed within the developing Brookwood Neighbourhood to the northwest. In accordance with the Secondary Plan, the Neighbourhood Plan shows the option of a traffic circle at the intersection of 34th and the collector street.
- 26th Street: South of Maryland Avenue, the Neighbourhood Plan realigns 26th Street to the west to better serve the plan area while maintaining the level of access currently enjoyed by existing developments on the east side of 26th south of Maryland. The collector street loops through the plan area connecting to 34th Street. As conceptually illustrated in Figure 3, the City of Brandon wishes to reserve the option of installing a traffic circle at the intersection of Maryland Avenue and 26th Street.
- Patricia Avenue: A collector street segment interconnects Patricia Avenue to the neighbourhood collector loop. The traffic circle shown on the plan is conceptual, as a possible option to a conventional T-intersection.

In addition to the above, primary traffic access points, the plan provides for the following, secondary access points (local street classification):

- Marquis Drive extension south to connect to the neighbourhood collector;
- New connection to realigned 26th Street to access existing development south of Maryland Avenue, and;
- New connection at the SW corner of the plan area to aid in the possible future development of the private lands on the east side of 34th Street.

TRANSIT

While there are no immediate plans to extend transit service through the plan area, the plan conceptually identifies a bus route on future 26th Street south from Maryland Avenue and east on Patricia Avenue. In addition, the neighbourhood collector loop is shown with a 25 metre (82 foot) ROW in order to accommodate bus traffic and transit stops.

STREET DESIGN

Streets within the plan area are shown with 18.2 metre (60 foot) right-of-ways for local streets and 25 metre (82 foot) right-of-ways

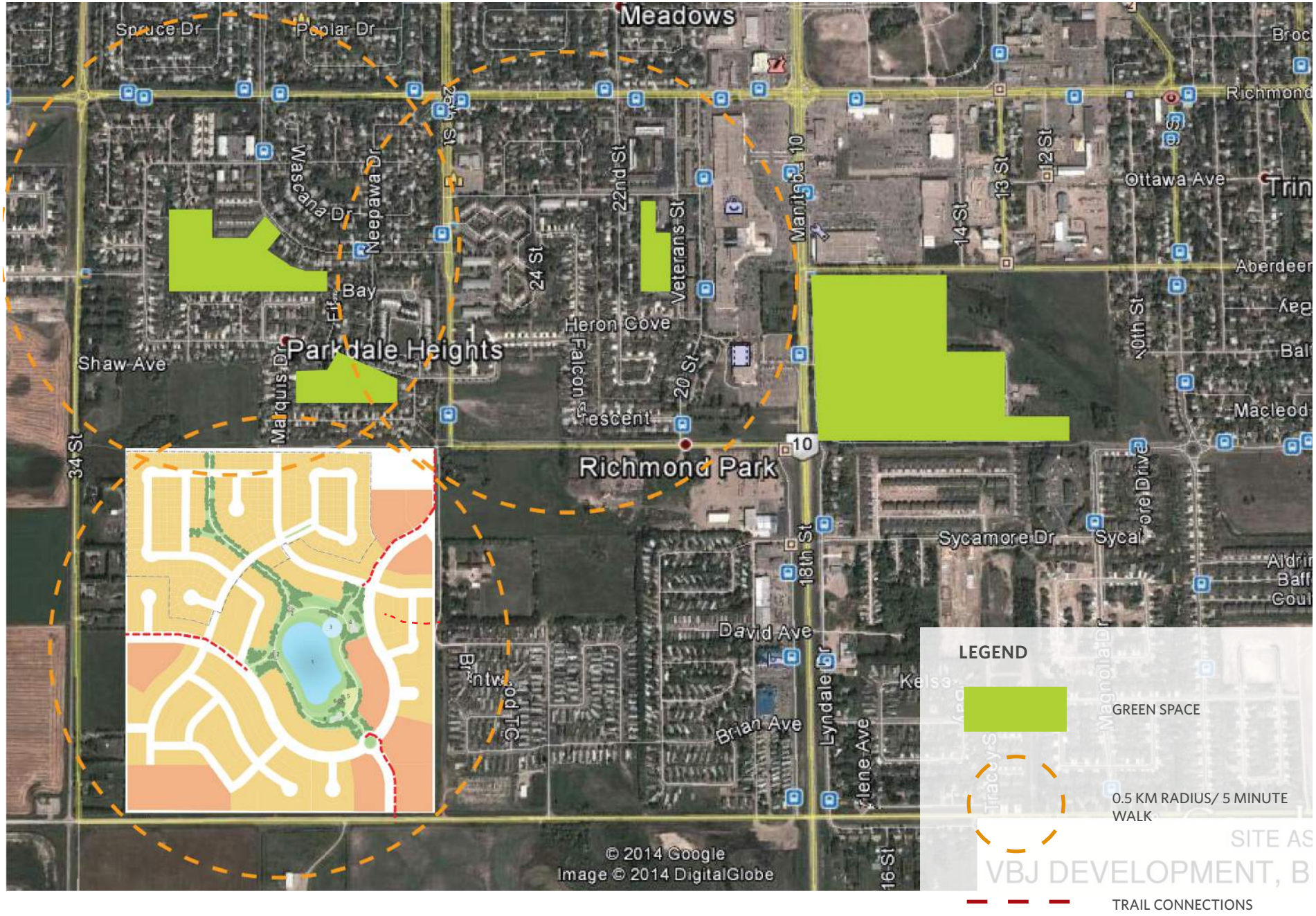
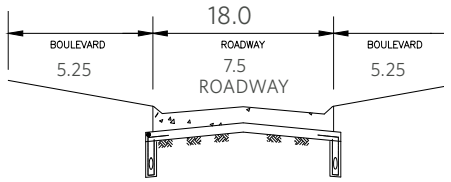


FIGURE 4: AREA PARKS AND OPEN SPACE

for collector streets. Typical cross-sections for different types of streets are illustrated below. As a potential transit route, the subdivision of lands fronting the 26th Street collector will be designed to minimize driveway approaches through the use of local street connections and flanking development. In addition, shared approaches and service roads or back lanes will be used where frontage development is unavoidable.

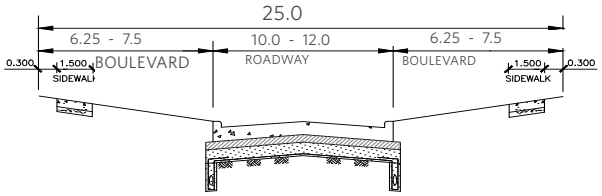
Each phase and stage of development will be provided with appropriate access to be determined in consultation with the Fire and Emergency Services Department. In the case of proposed Phase 2, the plan anticipates the southerly extension and realignment of 26th Street combining with Marquis Street to provide two (2) points of access. Should the extension of Maryland not occur within the Phase 2 time frame, the Developer will provide a second connection out to 34th Street.

LOCAL STREET

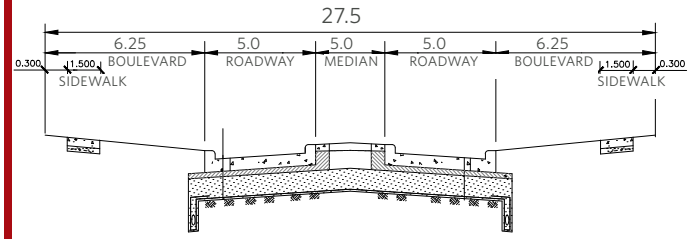


LOCAL STREET WITH SIDEWALK AT CURB

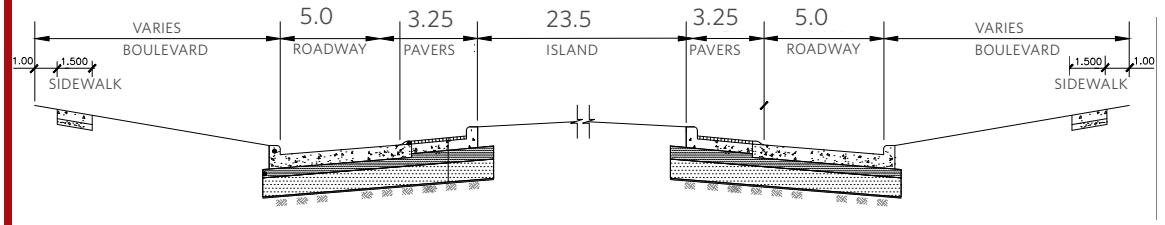
COLLECTOR STREET



LOCAL STREET WITH MEDIAN

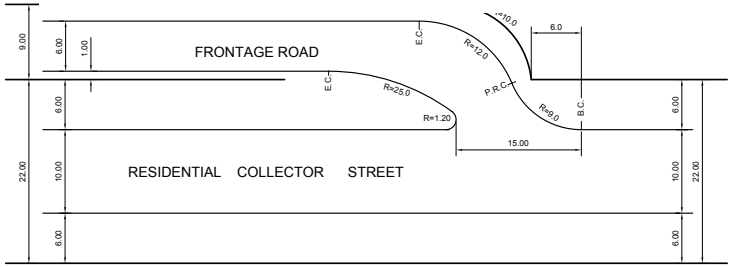


COLLECTOR STREET WITH ROUNDABOUT



IMAGES: LOCAL STREET CROSS SECTIONS (TYPICAL)

COLLECTOR STREET WITH FRONTAGE ROAD

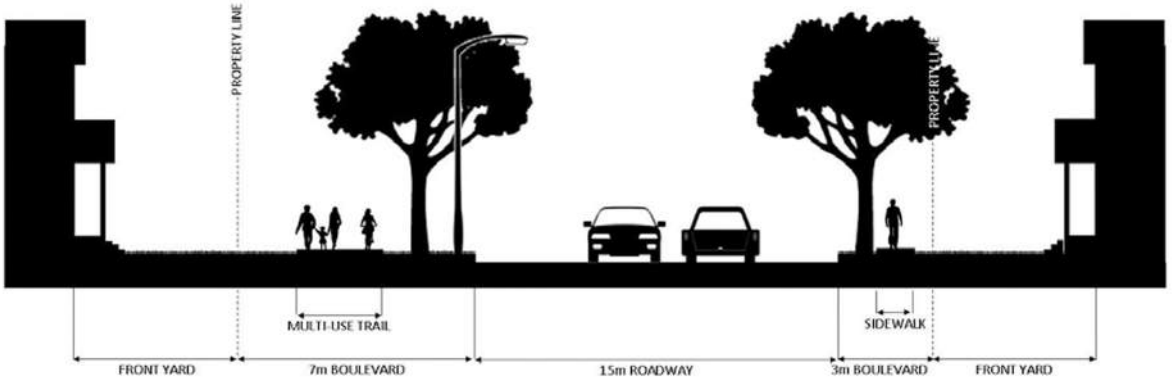


TRAIL NETWORK

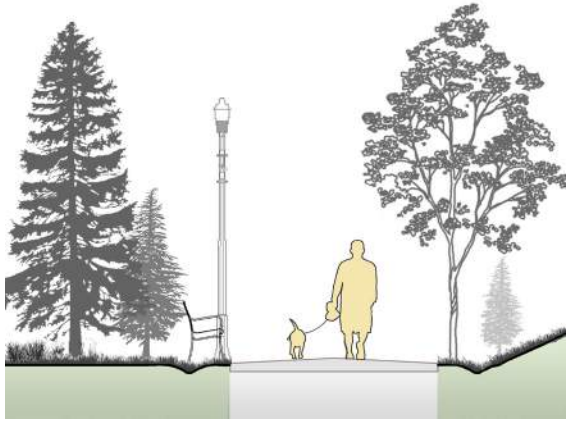
The neighbourhood trail network will consist of asphalt-surfaced primary on-street trails and secondary off-street trails. The trail network will interconnect existing and future development areas adjacent to the plan area and planned primary trails along 26th Street, Maryland Avenue, 34th Street and Patricia Avenue. Connector trails will have a minimum width of 3.0 metres for primary paths and 2.5 metres for secondary paths. Connector trails will have a minimum 5.0 metre frontage at trail heads with appropriate signage and rest points as per the Greenspace Master Plan. All trails will follow Crime Prevention Through Environmental Design (CPTED) principles and will provide barrier free access. At intersections, traffic-calming measures such as zebra crossings or raised crossings, along with pedestrian-safety measures like textured paving, will be employed.

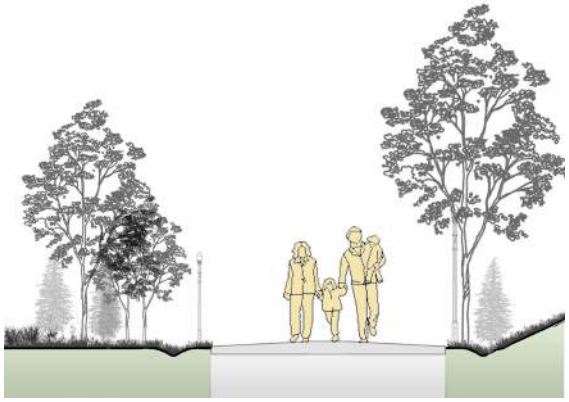
All pathways will be designed to conform to Brandon's accessibility guidelines. Light standards, signage, benches and waste receptacles will be placed so as not to obstruct pathway movement. Rest areas with benches will be located along the trail network and will incorporate different surfacing (e.g. compacted gravel or pavers) to indicate functional separation from the adjacent path. Wayfinding signage will be provided where required.

Figure 4 shows the proximity of the neighbourhood to community-scale parks and recreation facilities in the mature neighbourhoods to the north and east of the plan area that fall within a 10 or 15 minute walk from the centre of the plan area.



IMAGES: COLLECTOR STREET AND PRIMARY TRAIL





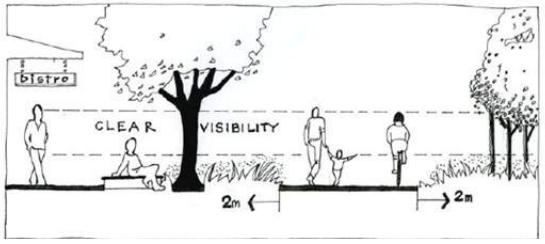
IMAGES: 2.5 METRE WIDE ASPHALT SURFACED LEISURE TRAIL (TOP LEFT) AND 3.0 METRE WIDE ASPHALT SURFACED PRIMARY CONNECTOR TRAIL (BOTTOM LEFT). POSSIBLE PEDESTRIAN SAFETY MEASURES INCLUDE ZEBRA CROSSINGS (TOP CENTER), TACTILE PAVERS (TOP RIGHT) AND RAISED CROSSING (BOTTOM RIGHT).

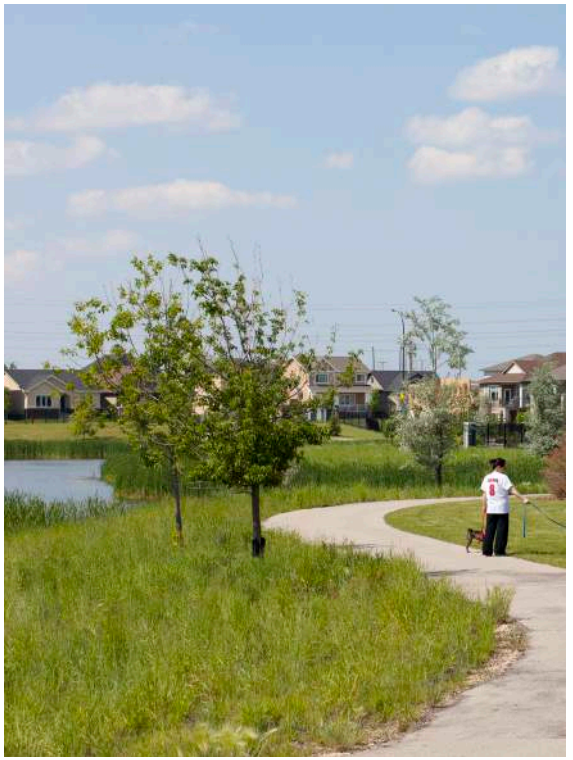
5.0 Open Space and Amenities Plan

In accordance with the Southwest Brandon Secondary Plan, the Neighbourhood Plan provides residents with a variety of opportunities for active and passive recreation. Key elements of the open space and amenities plan are described in the following paragraphs and illustrated in Figure 5. The trail and greenspace typology is taken from the City of Brandon Greenspace Master Plan (November 2014 Draft).

In addition to sidewalks on both sides of collector-classified streets, the neighbourhood is served by both Primary (on-street) trails and Secondary (off-street) trails. The Secondary trails encircle the storm water retention lake and connect via a greenway to the northwest quadrant of the neighbourhood and future development lands beyond. Primary "Connector" trails link this secondary trail system to 34th Street on the west, Patricia Avenue on the south, and Maryland Avenue on the north; streets that are all slated for future trails as part of the City-wide network expansion. Where provided, "Connector" greenspaces will be approximately 20 metres wide.

Rounding out the trail network are secondary "Leisure" trail connections to the future development lands north of Maryland and the private school and trailer park on the east side of 26th Street. As previously stated, the trail network and open spaces will follow CPTED guidelines by ensuring good visibility, controlled ingress and egress, adequate lighting and well-defined pedestrian spaces. All public spaces will be barrier-free as per Policy 5.1.1 of the Secondary Plan. Slopes, pitches and surfacing on pathways will conform to all City of Brandon accessibility standards. Amenities such as benches, receptacles and signs will be appropriately placed to allow free passage.





IMAGES: VISIBLITY OF THE TRAIL SYSTEM FROM ADJACENT HOUSES AND STREETS IS A KEY CPTED PRINCIPLE.

FIGURE 5: NEIGHBOURHOOD "LEISURE"GREEN SPACE

LEGEND

1. STORMWATER RETENTION POND
2. VIEWING AREA WITH BENCHES
3. ICE SKATING AREA
4. CHILDREN'S 5-12 PLAY AREA
5. NATURAL PLAY AREA
6. COVERED PAVILION
7. CHILDREN'S 2-5 PLAY AREA
8. TOBOGGAN HILL

The plan provides for neighbourhood-scale open space and recreational amenities that will also be readily accessible to residents in the surrounding areas by bicycle or on-foot via the trail network. The centre-piece of the open space plan is the lake which, in addition to providing land drainage and riparian habitat, serves as a focal point for both active and passive recreation.

The open space that surrounds the lake connects to the neighbourhood collector street at 3 locations providing view corridors to the lake itself as well as highly visible sites for the proposed recreational facilities. Entryways to the Leisure Greenspace at these locations will be provided with plazas planting beds, signage and benches. Possible facilities are identified conceptually on Figure 5 and include benches, children's play areas and, to encourage year-round activity, a toboggan hill and a manually-flooded skating surface. The open spaces and greenway will be landscaped with trees and shrubs for shade and visual appeal. In addition to the public open space and amenities described above, it is anticipated that higher density multi-family developments within the neighbourhood will incorporate outdoor activity areas and play spaces for their residents.

6.0 Population and Housing

The population estimates for the development area pictured in Figure 3 were derived from the "minimum" and "maximum" housing yields provided in the Southwest Brandon Secondary Plan and summarized in Table 2. The table also includes "expected" density factors (shaded gray) that were subsequently used to estimate the housing yield by development phase.

Table 3 provides low and high housing and population estimates for the plan area based on the minimum and maximum housing yields from Table 2. The housing yields were obtained by applying the Secondary Plan minimum and maximum density targets from Table 2 against the net development area for the three (3) major housing types: Residential Single Family (17.73 hectares), Residential Low Density Multiple Family (8.86 hectares), and Residential Moderate Density Multiple Family (8.49 hectares). The calculations indicate that the development area could generate between 747 and 1,793 housing units accommodating between 1,718 and 4,124 people at full build-out based on an average household size of 2.3 people per unit (2011 Canada Census).

As discussed in Section 7, "expected" density factors were used to estimate the housing and population estimates by development phase. Based on the expected density rates, the neighbourhood will generate in the order of 1,288 total housing units and a population of 2,962.

TABLE 2: RESIDENTIAL YIELD BY HOUSING TYPE

Neighbourhood Plan DESIGNATION	HOUSING TYPE	ZONING LABEL	TYPICAL BUILT FORM	HOUSING DENSITY IN UNITS PER HECTARE (ROUNDED)			HOUSING DENSITY IN UNITS PER ACRE (ROUNDED)		
				MIN.	EXPECTED	MAX.	MIN.	EXPECTED	MAX.
RESIDENTIAL LOW DENSITY	RESIDENTIAL SINGLE FAMILY	RSF	SINGLE DETACHED DWELLING	15	24	40	6	10	16
	RESIDENTIAL LOW DENSITY MULTIPLE FAMILY	RLD	SEMI-DETACHED, DUPLEX,TRIPLEX, 4-PLEX, TOWNHOUSE	15	36	40	6	15	16
RESIDENTIAL MODERATE DENSITY	RESIDENTIAL MODERATE DENSITY MULTIPLE FAMILY	RMD	TOWNHOUSE, STACKED TOWNHOUSE, LOW-RISE APARTMENTS	41	64	86	17	26	35
*USED IN CALCULATING HOUSING ESTIMATES BY DEVELOPMENT PHASE									

TABLE 3: HOUSING AND POPULATION ESTIMATES (RANGE)

ZONE	NET HECTARES (1)	HOUSING AND POPULATION RANGE					
		MINIMUM		EXPECTED		MAXIMUM	
		DENSITY	HOUSING	DENSITY	HOUSING	DENSITY	HOUSING
RESIDENTIAL LOW DENSITY (1)							
RESIDENTIAL LOW DENSITY - RSF	17.73	15	266	24	426	40	709
RESIDENTIAL LOW DENSITY MULTIPLE FAMILY - RLD	8.86	15	133	36	319	40	354
RESIDENTIAL MODERATE DENSITY							
RESIDENTIAL MODERATE DENSITY MULTIPLE FAMILY - RMD	8.49	41	348	64	543	86	730
TOTAL HOUSING LOW AND HIGH ESTIMATES			**747**		**1,288**		**1,793**
(1) BASED ON 26.59 NET HECTARES AND 2/1 RATIO OF DETACHED TO ATTACHED HOUSING							
POPULATION ESTIMATES AT 2.3 PERSONS PER UNIT (2011 CENSUS)	**2.3**		**1,718**		**2,962**		**4,124**

7.0 Phasing Plan

Figure 6 illustrates the preliminary phasing plan and Table 4 provides a breakdown of the potential housing yield and population generation based on the "expected" housing yields from Table 2.

Phase 1 includes the potential for an estimated 292 housing units and consists of lands that can be serviced using gravity sewers connecting to an existing wastewater sewer at the Maryland Avenue and Marquis Drive. Traffic access to Phase 1 will occur via Maryland Avenue and the southerly extension of Marquis Crescent. Phase 2 includes the potential for 200 housing units and would include development of the initial components of the Neighbourhood Leisure Park. Phase 2 assumes that the land transactions are concluded that would enable the extension and realignment of 26th Street. Phase 3 includes the potential for 315 housing units and completes the collector connection to Patricia Avenue. Phase 3 housing is predominantly multiple-family. Phase 4 includes the potential for 148 housing units and allows for completion of the collector street system and trail system. Finally, Phase 5 includes the potential for 333 housing units and provides for pedestrian access to Patricia Avenue and vehicular and pedestrian access to 34th Street.

Overall, using the "expected" density figures from Table 2, the Neighbourhood Plan as illustrated provides for a total of 1,288 housing units of all types accommodating a population of 2,962 at 2.3 persons per unit. Beyond Phase 1 it is intended that the plan be considered conceptual and subject to modifications depending upon market conditions and the demand for different housing types.

In terms of the development time frame, it is anticipated that Phase 1 completion will occur in 2017. The timing of subsequent phases will depend upon market conditions, but a conservative estimate points to a full development build-out by 2030.

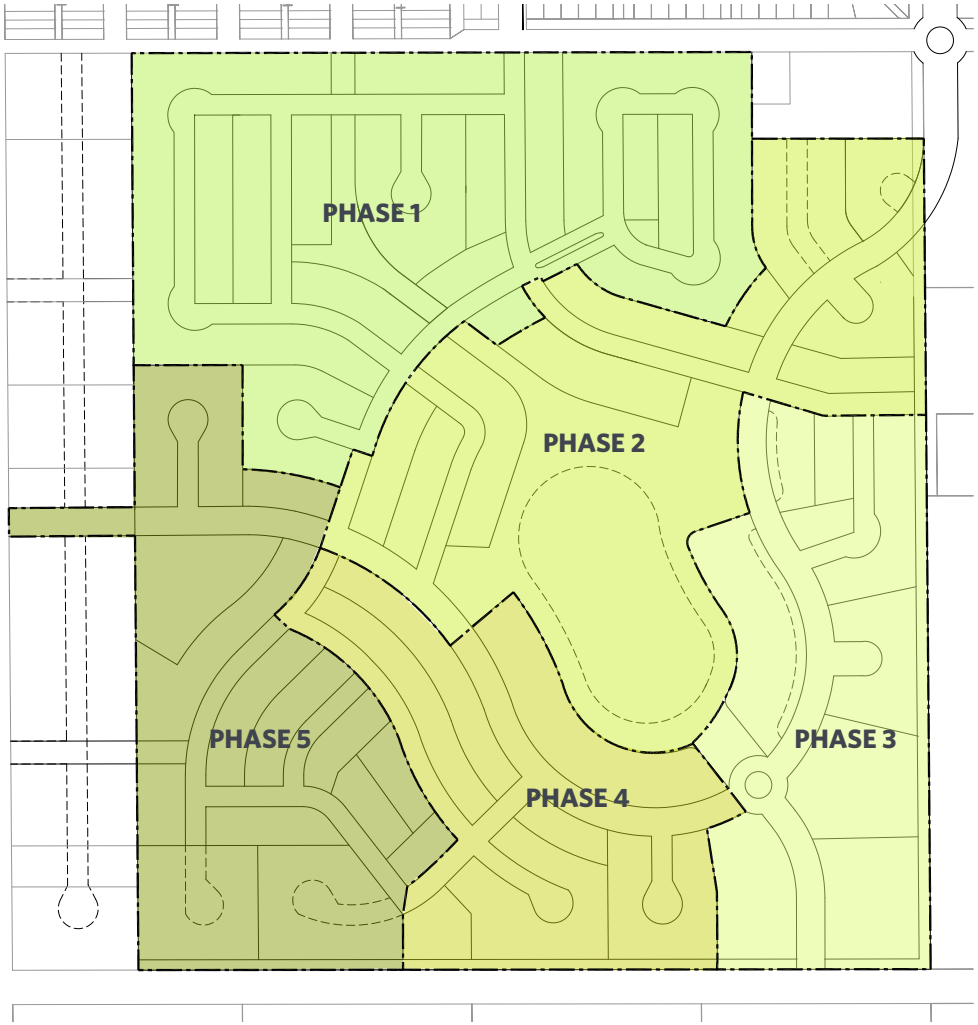


FIGURE 6: DEVELOPMENT PHASING

TABLE 4: PHASE BREAKDOWN

PHASE	1	2	3	4	5	ALL PHASES
STREETS	3.67	2.34	1.87	2.02	2.09	11.99
PARK & OPEN SPACE	.64	3.22	0.34	0.31	.24	4.75
LAKE		2.47				2.47
RESIDENTIAL LOW DENSITY	10.44	3.53	2.27	5.29	4.87	26.40
RESIDENTIAL MODERATE DENSITY		1.73	3.94		3.00	8.67
GROSS AREA	**14.75**	**13.29**	**8.42**	**7.62**	**10.20**	**54.28**
HOUSING ESTIMATES						
RESIDENTIAL LOW DENSITY	292	107	64	148	133	744
RESIDENTIAL MODERATE DENSITY		93	251		200	544
TOTAL ESTIMATED HOUSING UNITS	**292**	**200**	**315**	**148**	**333**	**1,288**
(1) USING MEDIAN HOUSING DENSITY ESTIMATES (ANY DISCREPANCIES DUE TO ROUNDING)						

8.0 Urban Design Considerations

VBJ' s vision for the neighbourhood is an inclusive community that merges a varied and attractively designed built environment with well-appointed parks and open spaces to create an appealing and highly marketable residential development. The development will incorporate a variety of housing types at different price points targeting people and families across all sectors of the residential market including renters, first-time home buyers, families in the move-up market and retirees. Representative housing types and styles are pictured.

The planning and design of residential neighbourhoods and the dwellings they contain is evolving in response to changing consumer tastes and preferences. Today's renters and buyers place a high value on "selling features" that extend beyond the dwellings themselves to include neighbourhood "feel" and appearance, recreational amenities, accessible and well-designed public spaces, and variety in building design and appearance. The Developer's team of in-house building and interior designers collaborate from the ground up to create marketable housing products. Key architectural design considerations emphasize variety in terms of façade and entry-way treatments, window placement, exterior cladding type, texture and colour, roof lines, etc. Through the lot sale process, home builders will be provided direction on the use of building materials, colours and architectural features on street-facing facades in order to create a varied and attractive streetscape.

The site plans and architectural designs of multi-family apartment and cluster townhouse projects will be prepared on a project-specific basis, but will conform to the standard requirements and guidelines as identified in the City of Brandon Southwest Brandon Secondary Plan and The City of Brandon Urban & Landscape Design Standards Manual.

Important site planning and urban design considerations will include building orientation and spacing to provide for natural light and

privacy, safe and convenient site access and circulation for drivers and pedestrians, appropriate lighting levels in parking lots and along walkways, adequate buffering of adjacent developments, the incorporation of outdoor play and gathering areas, and the application of environmental design principles in the selection of plant materials for the landscaping of yards and parking lots and the design of storm-water management systems.

9.0 Public Consultation Summary

In accordance with the City of Brandon Public Outreach Requirements [Appendix "D" of By-law No. 6642], the Neighbourhood Plan proponent held a Public Open House for area residents as outlined below.

Date and Location: The public meeting was held on Wednesday January 28th from 6:00pm to 8:00pm at the Westridge Community Centre located at 32 Willowdale Crescent in Brandon Manitoba.

Format: Informal drop-in with proponent representative in attendance to provide information and respond to questions.

Method of Notification: By Canada Post to property owners within 100 metres (328 feet) of lands owned by the Neighbourhood Plan proponent. The list was provided by the City of Brandon and is available upon request. Fifteen (15) people attended the Open House.

SUMMARY OF COMMENTS OR CONCERNS:

a. Positive verbal comments were expressed concerning the following plan elements:
   - the connecting greenway trail system;
   - the large, centralized green space;
   - the overall layout & design of the NP (new and different); and,
   - the proposed mix of housing types and densities.

b. Other verbal comments that were shared in an open discussion with attendees and the proponent representative:

Concern: Regarding traffic on Patricia Avenue (currently gravel) which is used as a short cut from 34th Street to 18th Street with a 90km posted speed. Concerns regarding traffic on Maryland Avenue and 26th Street during peak times due to traffic generated by Christian Heritage School.

Response: Residents were informed that a Traffic Impact Study had been completed for the area and that the traffic situation will be closely monitored and the study updated at each phase of development.

Concern: Regarding how the lands will be serviced.

Response: Residents were told that an Infrastructure Servicing Study had been completed for the area and that updates to that study would be done during each phase of development to ensure that the water, sewer and land drainage infrastructure can accommodate the development with no detrimental impact on area residents. Attendees were advised that major infrastructure upgrades would not be needed until Phase 2 of the development.

Concern: Regarding how the lands would be developed and phased over time

Response: Residents were shown the Neighbourhood Plan Land Use Map along with the Phasing Plan.

Concern; Regarding how private land owners could be involved in the future development of their properties.

Response: Residents were advised that in advance of development proceeding adjacent to private lands fronting 34th Street, owners will be contacted to look at options for incorporation their holdings either individually or collectively into the larger development.

10.0 Draft Traffic Impact Study

SUMMARY

A Traffic Impact Study (TIS) was prepared for the Neighbourhood Plan under conditions of full development. The purpose of the TIS was to:

a. Estimate the impacts of the proposed 134 Acre residential development on the adjacent roadway network; and

b. Determine what measures may be required to in order to mitigate any adverse traffic impacts.

The areas selected for study included the six (6) major intersections surrounding the development site, shown in Figure 7.

The intersections studied were:

- Richmond Avenue & 34th Street;
- Richmond Avenue & 26th Street;
- 18th Street (PTH 10) & Richmond Avenue;
- Maryland Avenue & 26th Street;
- 18th Street (PTH 10) & Maryland Avenue; and,
- 18th Street (PTH 10) & Patricia Avenue

The most critical intersection is 18th Street (PTH 10) & Richmond Avenue due to its having the highest traffic volumes and operating closest to theoretical capacity as determined by the analysis.

Intersection capacity is quantified using a letter grade from A to F called Level of Service (LOS) with LOS A representing intersections with minimal delay and LOS F representing gridlock. LOS D is considered acceptable for peak traffic periods.

The analysis conducted for this report shows that:

- All of the study intersections are currently operating at LOS A or B during the PM Peak, except for Richmond Avenue & 18th Street which is operating near capacity at LOS D.
- By 2040, the study area intersections are estimated to operate at LOS B or C during the PM Peak, except for Richmond Avenue & 18th Street which is estimated to reach capacity between 2030 and 2040 (LOS F).
- Traffic from the proposed development can be accommodated by all the study intersections beyond 2040, except Richmond Avenue & 18th Street.

It is estimated that Richmond Avenue & 18th Street will reach capacity once 67% of the proposed development is occupied, in 2025.

Based on the above findings, it is recommended that traffic at Richmond Avenue & 18th Street be monitored and evaluated periodically to determine appropriate timing and capacity needs for an upgraded intersection. No additional improvements to existing roads are required at this time attributable to traffic generation from the proposed development.

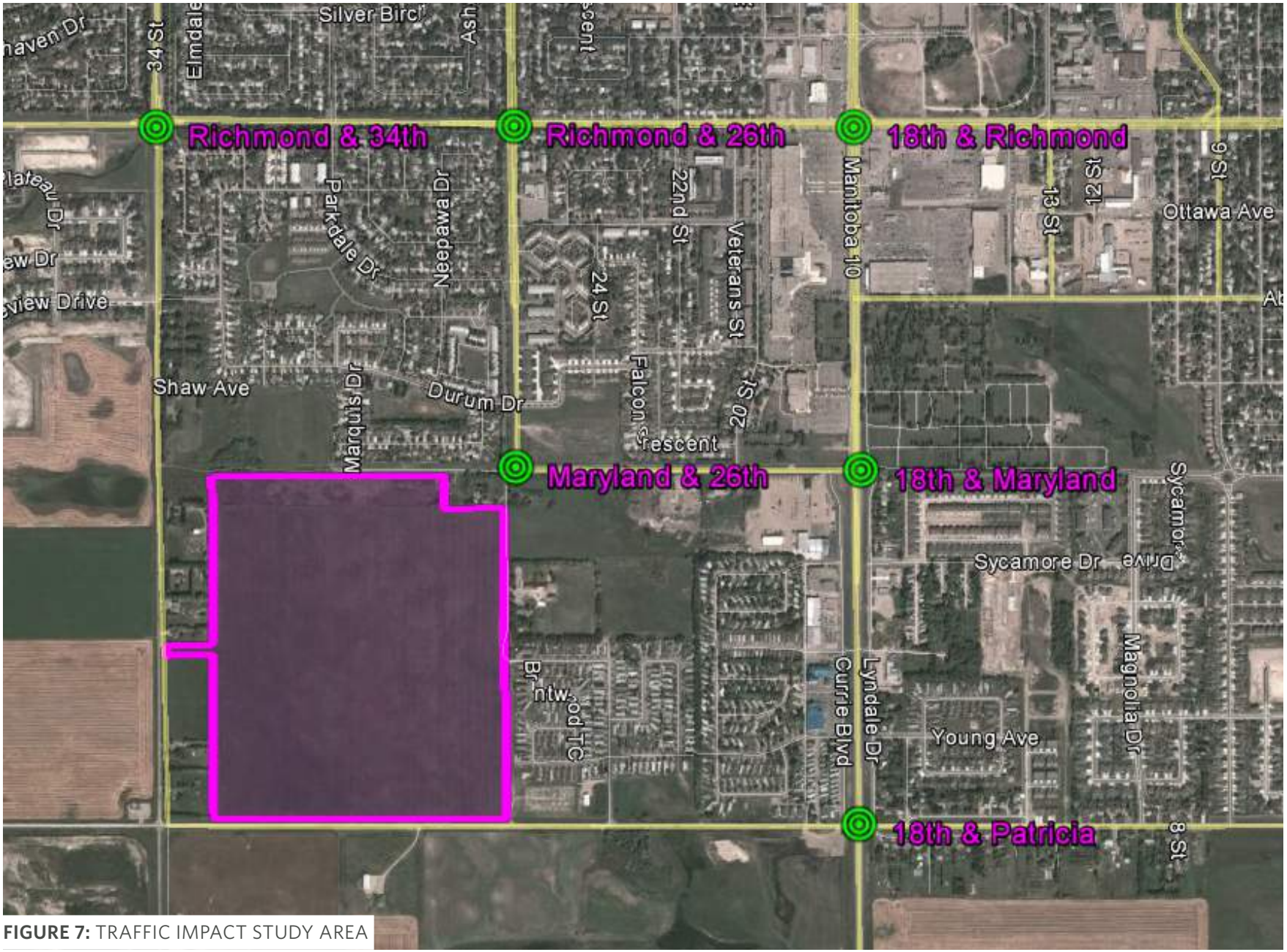


FIGURE 7: TRAFFIC IMPACT STUDY AREA

11.0 Municipal Servicing Summary

MUNICIPAL SERVICING OVERVIEW – EXECUTIVE SUMMARY

A Municipal Servicing Overview has been prepared in support of the Neighbourhood Plan and submitted to the City for review. The Municipal Servicing Overview is summarized in the following paragraphs.

As a prerequisite for development in the plan area as well as other lands in the southwest area of Brandon, the City of Brandon has carried out a series of studies over the past few years with the purpose of determining servicing requirements and identifying deficiencies that would require upgrading. These studies were primarily focused on the water distribution network and the sanitary sewer system. A study regarding storm drainage is currently being carried out.

WATER DISTRIBUTION SYSTEM

The water distribution system for the plan area will initially be fed from two (2) location points immediately north on Maryland Avenue. The first point is located at Marquis Drive and the other at 26th Street. For the initial stages of the development, the limits of which will be determined later through detailed modelling and design, these two point locations should provide adequate water flow volumes to the water distribution network for both domestic consumption demands and fire-fighting requirements, and should sustain the required minimum pressures under both conditions.

Later stages of the development may also require the extension of the existing water main on Patricia Avenue west to the plan area in order to improve water pressures and increase available delivery volumes. The need for the extension, as well as any other water distribution network requirements, will be determined later through detailed modelling, analysis and design.

WASTEWATER SEWER SYSTEM

The Neigbhourhood Plan area (SW ¼ 10-10-19 WPM) is situated immediately west and just outside of the wastewater catchment area for the South End Lift Station. As such, wastewater flows from the plan area would not be able to contribute flows to that system. With recent interest in the development potential for the plan area, as well as other properties in the vicinity, the City of Brandon commissioned several wastewater studies to investigate possible options to service these lands and accommodate wastewater flows from outside the catchment area of the South End Lift Station.

These studies specifically investigated whether there exists the opportunity to achieve either of two (2) options available for the disposal of wastewater as follows:

1. Determine whether or not there is available capacity in the adjoining wastewater sewer systems in the surrounding developed areas, and/or

2. Expand the catchment area of the South End Lift Station to include lands to the west, including SW ¼ 10-10-19 WPM, by taking advantage of unused available capacity of the South End Lift Station.

With respect to Option 1, and specifically the SW ¼ 10-10-19 WPM quarter-section, it was determined that there is available capacity in an existing wastewater sewer located at Marquis Drive. However, there is only enough capacity available to accommodate a portion of the SW ¼ 10-10-19 WPM quarter-section. Phase 1 of the development concept has been sized based on the estimate of available capacity. The actual proportion of land that can be serviced will be determined later through detailed modelling, analysis and design.

With respect to Option 2, the studies have determined that additional lands beyond the boundary of the catchment area of the South End Lift Station can be accommodated, including the balance of the plan area located in the SW ¼ 10-10-19 WPM, within certain limitations. The most significant obstacle in achieving this option is the fact that the existing wastewater sewer system adjacent to the outside lands does not have the capacity to accept additional flow. Therefore, in order to take advantage of this option, flow from the area would need to be transported to the South End Lift Station by means of a lift station and force main. The proposed location of the lift station and the alignment of the force main will be determined later through detailed modelling, analysis and design. It has also been noted that a review of the capacity and operation of the South End Lift Station may also be required as a part of the wastewater analysis and design.

STORM WATER

As an integral component of the neighbourhood plan, a storm water management strategy has been implemented to control and manage storm runoff from the development. In part, the strategy includes design features intended to mitigate the downstream effects of the development and reduce the likelihood of any adverse conditions as a result of storm water runoff released from the developed property.

In order to satisfy specific design criteria of the storm water management strategy, a detention/retention facility (Storm Water Retention Basin or SRB) has been incorporated into the concept for the plan area. Not only does the SRB provide storm runoff detention/retention duties, it also becomes an important part of the open space and amenities plan, providing recreation opportunities for neighbourhood residents. Storm water will be discharged from the SRB to the Patricia Avenue ditch at a controlled and manageable rate. At this point existing surface drains will convey the flow to the Gun Club Coulee. The details of the storm water management strategy will be determined later through detailed modelling, analysis and design in consultation with the City of Brandon, the RM of Cornwallis, MIT and Manitoba Conservation and Water Stewardship.

VBJ Developments

It begins with a plan.

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