A thick yellow vertical bar runs down the left side of the page. A yellow arrow-shaped graphic points to the right, overlapping the bar, and contains the text 'AUGUST 2015'.

AUGUST 2015

BROOKWOOD SOUTH

Neighbourhood Plan

A stylized graphic of green grass blades growing from the bottom left corner, extending upwards and to the right.

Waverley Developments

TABLE OF CONTENTS

1.	Site Context.....	1
2.	Community Vision.....	2
3.	Introduction.....	2
3.1	Purpose of the Plan and Policy Context	2
3.2	Land Ownership.....	4
3.3	Land Area Description.....	5
4.	Neighbourhood Design Elements	7
5.	Land Use	9
5.1	Residential	9
5.2	Community Use and Open Space Lands	10
6.	Transportation and Mobility.....	14
6.1	Streets and Overall Network.....	14
6.2	Active Transportation	15
6.3	Public Transportation	17
6.4	Traffic Impact Study	17
7.	Infrastructure and Utilities	18
7.1	Water	18
7.2	Wastewater	19
7.3	Land Drainage	20
7.4	Shallow Utilities.....	20
8.	Development Phasing.....	21
9.	Consultation Summary	22

List of Figures

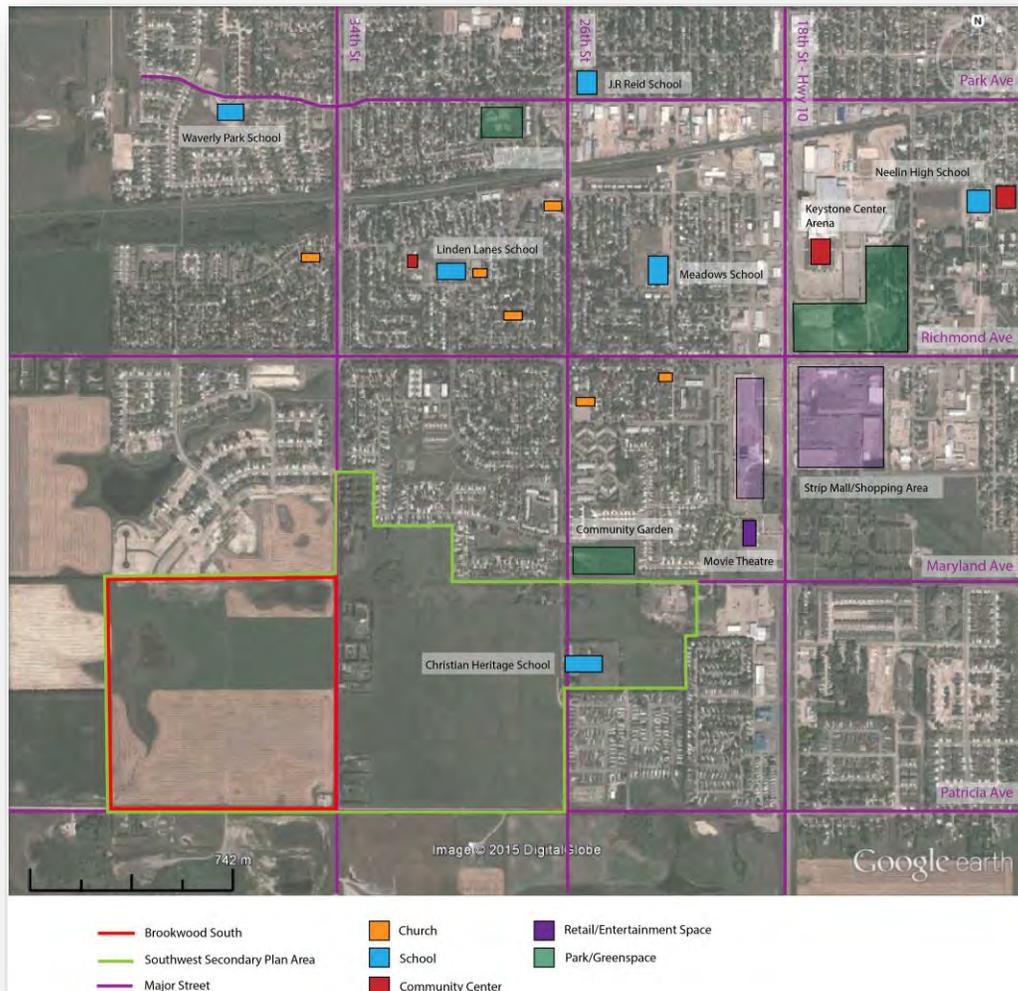
Figure 1	Site Context.....	1
Figure 2	Land Ownership	4
Figure 3	Drainage Basins	6
Figure 4	Drainage Discharge.....	6
Figure 5	Neighbourhood Concept Plan.....	8
Figure 6	NW Neighbourhood Park.....	11
Figure 7	SE Neighbourhood Park.....	11
Figure 8	Naturalized Open Space Area	12
Figure 9	School Site Concept.....	13
Figure 10	East-West Collector Street	14
Figure 11	North-South Collector Street.....	15
Figure 12	Primary Pathway – Connector Greenspace.....	16
Figure 13	Primary Pathway – Arterial Buffer.....	16
Figure 14	Primary / Secondary Pathway – Naturalized Area	16
Figure 15	Secondary Pathway – Mid-Block Connections	17
Figure 16	Primary Water Distribution System	18
Figure 17	Wastewater Collection System Layout	19]
Figure 18	Phasing Plan.....	21

1. SITE CONTEXT

Brookwood Park South is a quarter section of land (SE 9-10-19) that is the southerly extension of the Brookwood Park neighbourhood, west of 34th Street and north of Patricia Avenue. It is located in the southwest corner of the city and therefore subject to the Southwest Brandon Secondary Plan. It defines the very southwest corner of the City of Brandon; its west and south boundaries shared with the RM of Cornwallis.

The quarter section of land to the west of the site is farmed except for three large rural residential lots accessed from the Graham Drive cul-de-sac via Government Road. The land to the east is a planned residential neighbourhood, formerly known as the Downey Lands, with a row of rural residential lots along the east side of 34th Avenue facing the subject lands. Rural residential and vacant land is located south of Patricia in the RM of Cornwallis.

FIGURE 1: SITE CONTEXT



2. COMMUNITY VISION

The Brookwood Park South Neighbourhood Plan envisions a mixed-density neighbourhood. The naturalized wetland feature and integrated school site present an opportunity to build Brandon a complete walkable community with a wide variety of family housing options. Rich living opportunities abound in this green neighbourhood for all generations to find community and home; places to live and play and learn just a transit or bike ride away for those who travel to work.

The key characteristics of the new neighbourhood include:

- a range of housing forms from single-family homes and townhouses to apartments;
- integration of natural amenities like the naturalized stormwater pond to passive recreational spaces including opportunities for community gardens, and;
- increased community connectivity with pathways and sidewalks supporting comfortable walking distances, less than 400 metres, to the school, recreation, and public transportation

3. INTRODUCTION

3.1 *Purpose of the Plan and Policy Context*

The purpose of the Neighbourhood Plan is to describe the development intentions for the Brookwood Park South Neighbourhood and meet the requirements of the Southwest Brandon Secondary Plan, described in Section 6.3.6.

Three policy documents provide the development framework for the Brookwood Park South Neighbourhood:

- The Brandon and Area Planning District Development Plan, 2013
- The Southwest Brandon Secondary Plan
- The City of Brandon Greenspace Master Plan

Brandon and Area Planning District Development Plan, 2013 includes the subject lands as part of the planned greenfield areas that the City of Brandon has prioritized for growth and committed to expedite completion of new communities. The Plan anticipates greenfield areas will achieve a minimum density of 20 dwelling units per gross hectare. The Development Plan designates the subject land for residential development and requires a mix of housing forms and densities in residential areas.

Parks, recreation, and open spaces are also required in residential areas guided by the Greenspace Master Plan. The City requires up to 10% of the land to be dedicated for public reserve purposes at the time of subdivision.

The Plan requires school sites to be located adjacent to a collector and park or public reserve area for shared use of the space and facilities and that the land for schools be dedicated, up to 10% of the land being subdivided.

Development Plan design policies address landscaping, accessibility, buffers, safety, and attention to aesthetics for new development.

The Southwest Brandon Secondary Plan manages the next level of policy in support of the Development Plan. It further refines the vision and development expectations for the Southwest area of the city where the subject lands are located.

The Southwest Secondary Plan requires an elementary school, minimum 4.0 hectares and located next to a neighbourhood greenspace, be planned west of 34th Street in the centre of the Brookwood Park South neighbourhood.

The other critical site feature is the existence of a wetland that must be developed to accommodate storm water for half of the Brookwood Park South neighbourhood as well as 38 hectares northwest of the subject quarter section. Secondary Plan policies also require the natural area be protected without overtaking developable land.

The new neighbourhood is designated for low and medium residential development, defined as 15-40 units per net hectare and 41-86 units per net hectare, respectively. The Secondary Plan identifies three nodes of medium density in the neighbourhood, two on either side of the collector that intersects with 34th Street and one further west.

As arterials streets, 34th and Patricia must be buffered from the residential area with a landscaped area that is a minimum 12.0 metres wide to include a multi-use trail east-west along the southern site boundary and north-west along the eastern site boundary. The Plan requires other primary and secondary off-street trails to provide connections internal to the new community. A transit stop must be located adjacent to the school, west of 34th Street.

The City of Brandon Greenspace Master Plan describes a typology of greenspace for Brandon. The following community uses apply to the Brookwood Park South Neighbourhood Plan:

Connectors are the linear greenspaces that create a connected system of open space linking parks and other spaces together. The 15-metre wide pathway requirements essentially makes all of the primary, and some of the secondary, pathways greenspace connectors.

Leisure greenspace in the Greenspace Master Plan is the most common park type and its typology includes the requisite neighbourhood park envisioned in the Secondary Plan. They are typically a minimum of 1 hectare site centrally located and within walking distance of most homes in the neighbourhood.

Environmental greenspaces are naturalized areas that increase habitat and minimize maintenance requirements. The environmental lands in Brookwood Park South include the wetland that has been identified in the Southwest Secondary Plan.

Educational greenspace is the school ground that serves both the school and the adjacent neighbourhood. The perimeter of the area should have trees and a naturalized appearance though the site will have active and passive recreational activities.

3.2 Land Ownership

The quarter section of land is owned by Waverly Developments Ltd., except for a small parcel in the southeast corner that remains with Manitoba Hydro to accommodate an existing substation.

FIGURE 2: LAND OWNERSHIP



3.3 Land Area Description

The plan area is a full quarter section of land less a small parcel in the southeast corner that accommodates a Manitoba Hydro substation. It is bordered by 34th Street to the east and Patricia Avenue to the south.

Topography

The land is relatively flat with about a 7-metre change in elevation from the highest in the north-central area (405 metres) and the lowest at the southwest corner (397 metres). The land generally drains to the south except for 10 hectares in the northeast that drains northward.

Soils

The Brandon soils study describes the land which, until now, has been under cultivation where possible. Most of the area enjoys moderately well to well-drained soils (the prosser and purple series) while the “wetland” (poolex series) and a small area of the northeast (tadpole series) are poorly drained.

Environmental and Heritage Considerations

The Brandon Southwest Secondary Plan did not identify any Environmentally Sensitive Areas or Heritage Sites within the Plan boundaries.

Land Drainage

The pre-development condition of the development area has three separate drainage basins:

1. Approximately 10.1ha of the site drained to a naturally low area with no natural outlet. This drainage area did not contribute to the runoff rate from the development site.
2. Approximately 23.4ha drains directly from the site to the perimeter ditches on the east and south sides of the site.
3. Approximately 31.1ha drains into a naturally low area. This area did not permanently retain water in its natural state but acted as a natural detention area with a restricted natural outlet the throttled the outflow rate. During the last several years this area was not cropped but was cut for natural hay.

In addition to the 31.1ha from within the site that drained to the natural low area an additional 38.1 ha drained to the natural low area from the SW and NW $\frac{1}{4}$ sections of this section that the development is occurring.

Discharge from the development site prior to development will flow into the north ditch of Patricia Avenue, flow west to the mile road and then south to a natural drainage channel.



FIGURE 3: DRAINAGE BASINS

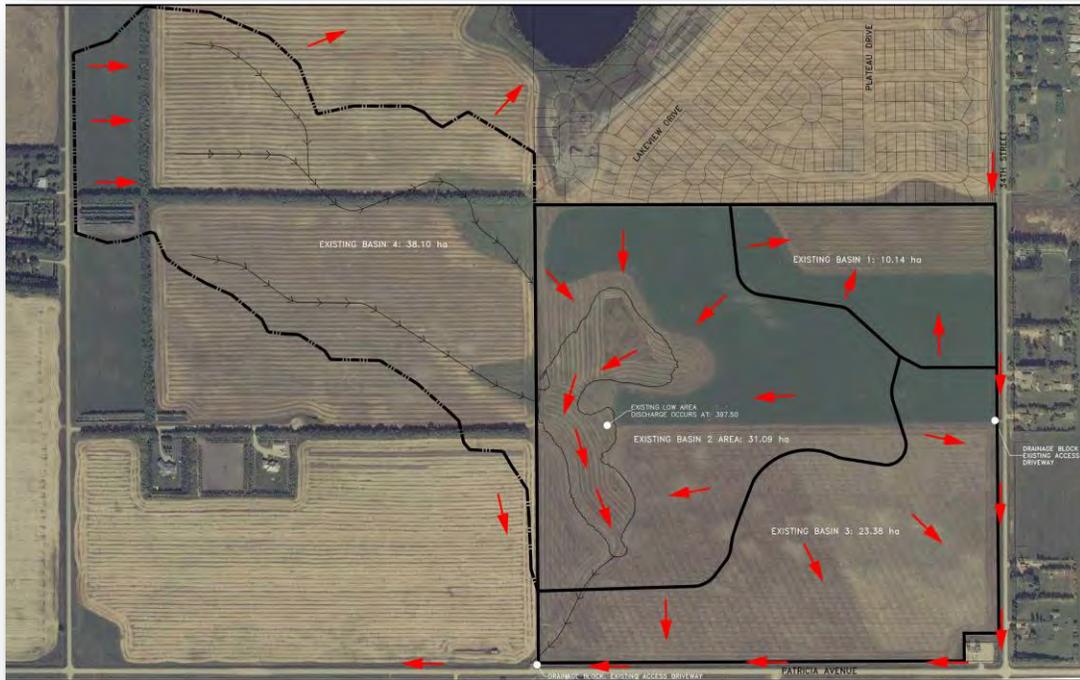


FIGURE 4: DRAINAGE DISCHARGE



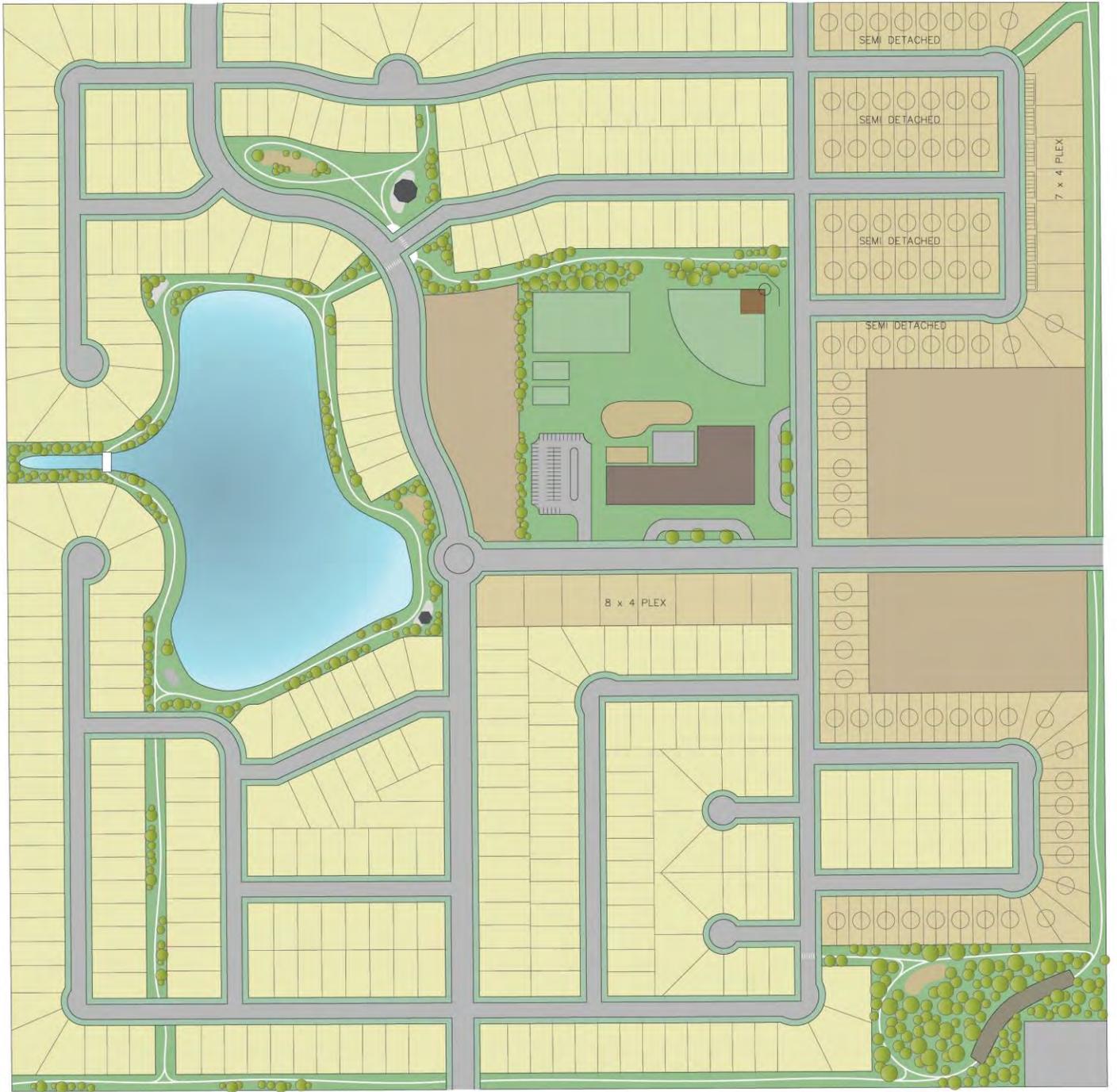
4. NEIGHBOURHOOD DESIGN ELEMENTS

Brookwood Park South falls within the Southwest Brandon Secondary Plan. The policies in the Secondary Plan intend to facilitate attractive, efficient, and orderly development of the lands within its boundary that is connected and compatible with adjacent neighbourhoods. The Secondary Plan directs:

- Cost-effective infrastructure;
- Livable communities that integrate residences with community facilities;
- Safe pedestrian access and recreational connections;
- Green-building design principles and site design to conserve energy and natural resources;
- Incorporation of emergency planning.

The key design elements of the Brookwood Park South Neighbourhood Plan are:

- ✓ The neighbour street pattern attempts to follow a somewhat modified grid in order to maintain the legibility of predominantly east-west and north-south streets.
- ✓ Four vehicular entrances to the community: two at the north boundary connecting Brookwood North to its southerly extension; one to the east connecting across 34th Street to the newly planned Bellafield neighbourhood, and; one to the south accessing Patricia Avenue. The active transportation network provides connection to the west though development of this area is not anticipated in the Brandon and Area Development Plan.
- ✓ Two traffic circles for place-making and traffic-calming.
- ✓ A combination of greenspaces, pathways, and sidewalks provides connectivity via active modes of transportation throughout the neighbourhood connecting internally to the school, parks, and naturalized areas as well, and externally to adjacent neighbours and the Brandon Active Transportation Network.
- ✓ A future school site central to the neighbourhood.
- ✓ Recreational areas are provided in addition to the pathway network including environmental and leisure type parks and active play areas and playfields associated with the future joint use school site.
- ✓ A storm pond / wetland with a local pathway encircling it for passive recreation.



- Residential (Low Density)
- Residential (Low Density) 2 , 3 or 4 Family Dwellings
- Residential Moderate Density - Multi Family

FIGURE 5: NEIGHBOURHOOD CONCEPT PLAN

5. LAND USE

5.1 Residential

The Brookwood Park South Neighbourhood Plan proposes a diverse range of housing options to accommodate a variety of demographics including aging in place. Units will range from single-family lots to apartment-style multiple family units. The Southwest Secondary Plan requires the Brookwood Park South neighbourhood develop predominantly low density residential (14-40 units per net hectare) with three nodes of moderate density housing (41-86 units per net hectare) adjacent to the east-west collector street.

Low Density Residential

The Plan proposed a range of low density residential housing (to be zoned RSF and RLD), from single family lots to 2, 3, and 4-plexes. The Residential Single Family zoning district (RSF) will accommodate the lowest density properties and the Residential Low Density Multiple Family zone (RLD) will manage development of the 2, 3 and 4 family dwellings. The lowest density housing is located in the vicinity of the wetland to minimize development impact and create a quiet and passive trail system around the area. The townhouse type development is planned for the east part of the site, closer to future public transit and the active transportation connections.

Moderate Density Residential

Multiple-family development (to be zoned RMD) is located along the neighbourhood collectors, clustered to create a sense of community and place with direct connection via pathways to neighbourhood green space and the school site. The most density will be built at the eastern gateway to the neighbourhood on either side of the collector street where it meets 34th Street. Apartments are also planned adjacent to the school site. The sites enjoy a direct connection to the primary city active transportation system. The proposed housing can be accommodated with the RMD zoning district, although a zoning amendment to allow more than three storeys may be required to achieve the City's desired nodal densities.

	Area (ha)	units (low)	units (planned)	units (high)
RSF lots	25	489	333	1304
RLD lots	7.6		218	
RMD lots	4.5	185	391	387

5.2 Community Use and Open Space Lands

The community use and open space lands component of the Brookwood Park South Neighbourhood Plan accounts for 14.3 hectares, or 22% of the gross developable land area. According to the Southwest Secondary Plan, these community and recreational lands will support community liveability and create a unique sense of place. The Brookwood Neighbourhood Plan describes a community designed with open spaces that:

- connect neighbours and amenities;
- promote active transportation options;
- present neighbourhood recreational opportunities;
- conserve the natural features of the land, and;
- manage storm water effectively and efficiently in a way that saves the municipality ongoing operational costs and creates the highest quality amenities to nearby properties.

Greenspace	Area (ha)	Description
Connectors (OS)	4.6	Buffers along 34 th & Patricia; wetland paths.
Leisure (PR)	2.0	Primary passive park serving the neighbourhood.
Environmental (OS)	3.7	Naturalized area associated with the wetland.
Educational (OS)	4.0	Athletic facilities & playgrounds at school site.

Trails and Pathways (Connector Greenspace)

Linear pathways respect the primary and secondary off-street network illustrated in the Secondary Plan. They provide both a commuter and a recreational purpose in the Neighbourhood Plan, designed for pedestrians, cyclists, and other non-motorized modes. The trail systems supporting neighbourhood mobility are further described in the Active Transportation section of the Neighbourhood Plan.

A 15-metre multi-use trail along the west side of 34th Street buffers the arterial from the residences and creates a direct linkage from the neighbourhood to Brandon's Inner Loop Trail. The primary pathway system is looped through the neighbourhood from the south terminus of 34th Street west along Patricia Avenue then north to the wetland and back to 34th Street as a separated active transportation facility within the collector right-of-way.

The pathways create an internal trail system throughout Brookwood Park South that will be developed with universal design standards and adhere to CPTED (Crime Prevention Through Environmental Design) Principles. The trails focus on connecting residents to the school, park, and wetland areas.