East Brandon Industrial Area Secondary Plan

SCHEDULE A OF BY-LAW NO. 7209 |

East Brandon Industrial Area Secondary Plan

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SECTION ONE: INTRODUCTION

1.0 INTRODUCTION

1.1 PLAN PURPOSE

The East Brandon Industrial Area (EBIA) Secondary Plan establishes the policy framework for the future planning and development of the Secondary Plan area. The plan is intended to facilitate the efficient, orderly and environmentally sound development of the industrial area in a manner that is compatible with existing development as well as the area's natural resources and environmental features.

The EBIA Secondary Plan builds on previous studies for the EBIA, including the industrial land development forecast (Schedule E) that identified the need for between approximately 78 to 96 hectares (193 to 237 acres) of industrial land between 2015 and 2045. As the land demand represents only 4% of the total industrial land area, the challenge is not in providing land, but in formulating an infrastructure investment strategy to provide a wide variety of industrial lots of varying sizes and servicing attributes necessary to accommodate a wide range of potential users.

1.2 READING THIS DOCUMENT

This Plan should be read in its entirety as many aspects of the plan are interrelated and policies included in one section may apply to other sections. The Brandon and Area Planning District Development Plan, 2013 (Development Plan), along with the City of Brandon Zoning By-law No. 7124 (Zoning By-law), provide important policy context and implementation tools for this Secondary Plan.

This Plan is organized according to the following Sections:

- Section 1 provides information on the planning context and development framework for the East Brandon Industrial Area.
- Section 2 provides the plan goals and objectives.
- Sections 3 through 7 include policies for specific plan components including the land use concept, transportation and servicing elements, environmental considerations and urban design. The policies should be interpreted and applied in conjunction with the Development Plan and Zoning By-law.
- Appendices: Attached to this Secondary Plan document are the following:
    - Reference Maps providing information on development plan land use designations and zoning as well as conceptual information regarding available telecommunications, natural gas and hydro services; and,
    - Plan Schedules consisting of technical reports on municipal services, roads and transportation and the environment, along with the February 2016 report entitled *City of Brandon Industrial Land Development Forecast (East Brandon Industrial Area)*, and plan implementation actions.

1.3 LOCATION OF THE SECONDARY PLAN

As shown in Figure 1: Plan Area and Growth Nodes, the EBIA Secondary Plan area encompasses

the entire eastern part of the City of Brandon, an area of approximately 2,708 hectares (6,693 acres). The plan area is bounded on the north and east by the Assiniboine River, on the south by Patricia Avenue East, and on the west by 17th Street East north of Richmond Avenue East, and the unimproved Douglas Street right-of-way (ROW) south of Richmond Avenue East.

1.4 EBIA PLANNING CONTEXT

The EBIA location in relation to the larger city and the bordering rural municipalities of Elton and Cornwallis is shown in Figure 2: Regional Context. While the EBIA Secondary Plan area is confined to the City of Brandon, the development of the industrial area will influence the adjoining municipalities and the region, including:

- day-to-day interjurisdictional and operational issues involving service delivery for roads and water management;
- the management of urban growth in the fringe area around Brandon; and
- regional socio-economic benefits to the entire southwestern portion of Manitoba.

Currently, planning and land use within the EBIA is governed by the Brandon and Area Planning District Development Plan and the City of Brandon Zoning By-Law, as described below.

Brandon and Area Planning District (BAPD) Development Plan: The BAPD is made up of the City of Brandon and the rural municipalities of Elton and Cornwallis. The EBIA lands are designated Industrial under the 2013 Brandon and Area Planning District Development Plan. The BAPD Development Plan land use map is reproduced in Reference Map #1, appended.

City of Brandon Zoning By-Law: The EBIA lands are zoned under the Brandon Zoning By-law No. 7124 as Industrial Restricted (IR), Industrial General (IG), and Industrial Heavy (IH). The zoning map for the EBIA is reproduced in Reference Map #2, appended.

1.5 EBIA PLANNING FRAMEWORK & POLICY AREAS

The EBIA Secondary Plan land use framework is based on the 2016 *City of Brandon Industrial Land Development Forecast (East Brandon Industrial Area)* that recommended a "nodes and corridors" approach to planning the EBIA. The recommended focus of infrastructure investment should be on existing nodes of industrial development at major intersections and along major road corridors within the industrial area. The EBIA Secondary Plan identifies four industrial nodes in Figure 1: Plan Area:

1. Victoria Avenue East Industrial Node;
2. Richmond Park Industrial Node;
3. PTH 110 Industrial Node; and,
4. Richmond East Industrial Node.

The above nodes form the basis for the EBIA land use policy area designations illustrated in Figure 3: Land Use. The land use designation policy areas, detailed in Table 1, are differentiated

according to the desired level-of-service (LOS) within each area. The larger policy areas are further divided into the Development Sub-Areas outlined in yellow in Figures 1 and 3 that conceptually represent lands that may be suitable for future development depending upon:

- site or area-specific environmental considerations;
- access and servicing constraints; or
- man-made impediments to development.

Table 1: Land Use Areas and Industrial Nodes

EBIA Land Use Designation	Industrial Node (where applicable)	Level-of-Service (LOS)	Gross Area		Sub-Development Areas (gross area, conceptual only)
Full Service Area "A" (FS-A)	Victoria Avenue Node	Municipal sewer and water, paved roads	235 ha (582 ac.)	8.7%	1 – 29 ha. (73 ac.) 2 – 18 ha. (45 ac.) 4 – 37 ha. (90 ac.)
Full Service Area "A" (FS-A)	Richmond Park Node	Municipal sewer and water, paved roads	128 ha (316 ac.)	4.7%	4 – 85 ha. (210 ac.) 5 – 88 ha. (218 ac.)
Full Service Area "B" (FS-B)	PTH #110 Node	Municipal sewer and water, paved or gravel roads	555 ha. (1,372 ac.)	20.5%	9 – 40 ha. (98 ac.) 10 – 36 ha. (89 ac.)
Full Service Area "B" (FS-B)	Richmond East Node	Municipal sewer and water, paved or gravel roads			11 – 69 ha. (170 ac.) 12 – 72 ha. (178 ac.) 13 – 178 ha. (440 ac.)
Partially Services Area (PS)	N.A.	Municipal water, private wastewater system, paved or gravel roads	421 ha. (1,040 ac.)	15.5%	6 – 64 ha. (158 ac.) 7 – 108 ha. (226 ac.) 8 – 75 ha. (187 ac.)
Limited Development Area (LD)	N.A.	Municipal sewer and water, paved or gravel roads, if developed in future	1,004 ha. (2,481 ac.)	37.1%	N.A.
Unserviced Area (US)	N.A.	Private Sewer and water, gravel roads	365 ha. (902 ac.)	13.5%	14 – 81 ha. (200 ac.) 15 – 105 ha. (260 ac.) 16 – 75 ha. (185 ac.) 17 – 90 ha. (223 ac.)

1.6 FIXED ELEMENTS OF THE PLAN

The Secondary Plan area includes a number of fixed elements outlined below and illustrated on maps accompanying this document.

Utilities: The EBIA is crisscrossed by major utility corridors and easements, the locations of which may impact development on a site-by-site basis. Some of the key facilities include the following:

- Manitoba Hydro Brandon Thermal Generating Station and regional and local network of three-phase and single-phase transmission lines and local substations.
- Bell-MTS, Westman Communications and Shaw telecommunications and fibre-optic cable, buried and aerial.
- Natural gas lines (Manitoba Hydro Centra Gas).

City of Brandon Facilities: The City of Brandon operates the following major municipal facilities within the EBIA:

- Eastview Landfill site and waste diversion centre.
- City of Brandon Wastewater Treatment Facility.
- City of Brandon Water Reclamation Centre.
- City of Brandon Public Works Yard.

Transportation: The EBIA transportation services include the following:

- Rail: CN and CP mainlines, branch lines and private spurs.
- Highways: PTH 110 Brandon By-pass.
- Streets: Major east-west streets include Victoria Avenue East, Richmond Avenue East (paved) and Patricia Avenue (gravel); major north-south section roads include 17th Street East (paved) and gravel section roads including 33rd Street East, 49th Street East, and 65th Street East.
- Transit: Bus Service on 17th Street East and Richmond Avenue East to Maple Leaf Foods.
- Bike paths: Richmond Avenue East to 17th Street East; 17th Street East north to Rosser Avenue; Victoria Avenue East to 33rd Street East.

Environmentally Sensitive Areas: The EBIA contains wetlands and observed, endangered or protected flora and fauna as outlined in Section 6: Environmental Considerations, and generally located in Figure 6a. Where environmentally sensitive areas or species are identified, The Conservation Agreement Act and The Endangered Species Act shall take precedence over this Secondary Plan.

Cultural Heritage Sites/Archaeological Artifacts: No cultural heritage sites have been identified on lands within the Secondary Plan area. However, should Cultural Heritage Sites or Archaeological Artifacts be identified within the Secondary Plan area, Section 17.0 of the Development Plan and the Heritage Resources Act shall take precedence over this Secondary Plan.

Community Amenities: The major community amenity currently with in the EBIA is Millennium Park at the northwest corner of Richmond and PTH 110. The park contains several ball diamonds with a plan for a future football field expansion. The Brandon Greenspace Master Plan proposes a trail connection from Millennium Park along PTH 110 to the larger city-wide trail network.

Topography: The EBIA lands generally slope in a northeasterly direction towards the Assiniboine River, declining from a high elevation of 392 meters ASL (1,286 feet ASL) in the SW corner of the area to a low elevation of 351 meters ASL (1,152 feet ASL) along the river at the SE corner; a total drop of 41 meters (134 feet). This represents an average slope of 0.5%. Generally, the BIA terrain does not pose a development constraint, however, a prominent ridge does traverse the area in a line from Victoria and 17th to Patricia and 49th, producing slopes in the order of 15 - 20%, which could impede site development on impacted parcels for land uses or operations requiring larger expanses of level land.

Drainage: An interconnected system of natural wetlands and streams and engineered ditches and drainage works has created a drainage network that has proven adequate for managing overland flows and runoff from the spring melt and extreme rain events. Further land drainage improvements will occur as the area develops and new roads are constructed. Land drainage management will involve a variety of natural and engineered components including piped LDS, road ditches, field drains, pumping stations, river outfalls, storm-water detention/retention basins, on-site storage, and streams and wetlands with appropriate water quality protection, subject to City and provincial engineering and environmental approval.

Aggregate Resources: Consistent with the area's soil profile, there is a high potential for lands within the EBIA to contain "medium" to "high" value aggregate deposits as identified in Figure 6b: Aggregate Resources. Aggregate mining is the most prominent use of land within the EBIA and a valuable contributor to the local construction industry and the economy as a whole. Provincially, aggregate resources are protected under the Provincial Planning Regulation (MR 81/2011), Policy Area 8: Mineral Resources, which can be enforced to prevent land use and development that would prevent or impede the mining of medium- and high-value deposits.

In addition, The Development Plan contains policies regarding the protection and extraction of medium and high value aggregate resources (Section 14: Natural Resource Policies; Reference Map #8: Aggregate Resources). Aggregate resources are also protected under the Zoning By-Law, which employs an "Aggregate Deposit Overlay Zone" that limits permitted uses on lands determined to contain "high" value aggregate, as conceptually identified on Reference Map #8 of The Development Plan, to recreation, low intensity agriculture and outdoor storage, while prohibiting "buildings" entirely. Upon adoption, the EBIA Secondary Plan will take precedence over the BAPD Development Plan in providing policy direction for matters involving aggregate resources within the secondary plan area.

Existing Development: The existing development pattern is dispersed, with industries and businesses scattered throughout the area, some located on land holdings the size of which exceeds their current operational needs. Within the EBIA, the largest land users, operationally and/or by ownership, include Koch Fertilizer, the City of Brandon, Maple Leaf Meats, Manitoba Hydro, Wesman Salvage, Crop Production Services, Canexus Chemicals, Federated Cooperatives, and Allwest Gravel. The predominant land use is quarry development for aggregate extraction and gravel processing, with over a dozen active or dormant pits of various sizes within the EBIA.

1.7 GOVERNING PROVISIONS

1.7.1 The Planning Act

The Act sets the legislative framework for planning in the Province. The Act addresses all levels of planning with specific provisions on municipal planning including requirements for the formulation and adoption of Development Plans, Secondary Plans and Plans of Subdivision. This Secondary Plan is subject to Part 4 of the Act.

1.7.2 Brandon and Area Planning District Development Plan (2013)

The Development Plan provides a long-term vision for the City of Brandon as well as specific direction on issues such as growth management, land use, housing, recreation and culture, municipal infrastructure, and transportation. The Development Plan also identifies specific areas within the City of Brandon that require the development of Secondary Plan.

1.7.3 City of Brandon Zoning By-law No. 7124

The Zoning By-law implements the Development Plan by providing regulatory standards and bulk regulations for developments and classifying property in appropriate zoning districts according to land use type and intensity.

1.7.4 Other Plans and Policies

Other plans and policies referenced throughout this Secondary Plan provide both direction and support for implementation. These plans and policies include, but are not limited, the following:

i. City of Brandon Greenspace Master Plan;
ii. Brandon Area Road Network Development Plan;
iii. City of Brandon Water Conservation Plan;
iv. City of Brandon Urban Forestry Management Plan; and,
v. Central Assiniboine and Lower Souris River Integrated Watershed Management Plan.

1.8 INTERPRETATION

The Secondary Plan refines and compliments the provisions of the Development Plan. The detailed policies in the Secondary Plan shall supersede the policies in the Development Plan. Where the Secondary Plan is silent on matters contained in the Development Plan, the relevant provisions of the Development Plan shall govern. Where a list of permitted uses within a land use designation provided in the Secondary Plan expands, contracts or provides further details regarding permitted uses listed in the Development Plan and City of Brandon Zoning By-Law No. 7124, the permitted uses shall be those contained in the Secondary Plan.

1.9 POLICY APPLICATION

In cases where the word “may” is included in a policy, it is provided as a guideline or suggestion toward implementing the intent of the policy.

In cases where the word “should” is used in a policy, the policy is intended to apply to a majority of situations. However, the policy may be deviated from in a specific situation where the deviation is necessary to address unique circumstances that would otherwise render compliance impractical or generate substantial hardship, and to allow an acceptable alternate means for achieving the general intent of the policy.

In cases where the words “shall” or “will” are included in a policy, the policy is considered mandatory. However, where actual quantities or numerical standards are contained within a mandatory policy, the quantities or standards may be deviated, provided that the deviation is

necessary to address unique circumstances that would otherwise render compliance impractical or generate substantial hardship, and the intent of the policy is still achieved.

1.10 SECONDARY PLAN COMPONENTS

Plan Figures: The Secondary Plan area shall be developed in general accordance with the information provided in the Figures where that information is deemed relevant to EBIA development. For the purposes of the Secondary Plan, references made to "areas designated" shall mean the areas designated on the Figures. Except where otherwise indicated, elements in the Figures cannot be adjusted without an amendment to the Secondary Plan.

Schedules: The Secondary Plan Schedules include technical reports on servicing, transportation, the environment, industrial land demand, and implementation recommendations. The Schedules provide background information and are not part of the Secondary Plan and any changes thereto will not require a plan amendment.

Reference Maps: The Reference Maps appended to the Secondary Plan document are provided for general information. The maps are drafted to a conceptual level of detail and the respective utility providers should be consulted for detailed information concerning their servicing networks and capacities. The reference maps are not part of the Secondary Plan and any changes thereto will not require a plan amendment.

1.11 AMENDMENTS TO THE SECONDARY PLAN

The Plan is adopted as a by-law of the City of Brandon. Amendments are required to follow the procedure established in Part 5: Zoning By-laws under The Planning Act through application to the Planning, Property and Buildings Department. Supporting information required to evaluate and justify the amendment will be required. Revisions may be made to the Secondary Plan without the need for a secondary plan amendment in the following cases:

i. Correction of numbering, cross-referencing, grammar, punctuation or typographical errors or revisions to format in a manner that does not change the intent of a provision;
ii. Adding or revising technical information on the plan Figures that does not affect the designation of lands including, but not limited to, matters such as updating and correcting infrastructure information, legends or title blocks; and,
iii. Changes to headings, tables of contents, figures, page numbering, footers and headers, which do not form a part of this by-law and are editorially inserted for convenience and reference only.

1.12 MONITORING, REVIEW & EVALUATION

The Secondary Plan is intended to be a dynamic document that will be revised and updated as circumstances change within and adjacent to the Plan Area. Periodic reviews of the Secondary Plan shall be undertaken to ensure the Secondary Plan remains consistent with the objectives and policies of the Development Plan.

2.0 GOALS AND OBJECTIVES

The East Brandon Industrial Area (EBIA) Secondary Plan provides a framework for the future growth of, and investment in, Brandon's chief industrial area. Through the Secondary Plan, the City of Brandon intends to showcase the advantages of the EBIA while offering a range of parcel sizes, development infrastructure and support services that will appeal to a broad range of business and national and global industries and markets. Guiding the Plan are the following six *Goals* and associated *Objectives* that express the *vision* for the EBIA:

GOAL 1. FOSTER INDUSTRY CLUSTERS

To foster the development of industry clusters and generate opportunities for synergistic business relationships by building on existing nodes of activity and assets of the EBIA.

Objective: Intensify existing agri-business, food processing and transportation industry clusters within identified nodes.

Objective: Facilitate synergistic relationships among businesses within defined areas to optimize resource use and reduce servicing costs and environmental impacts.

Objective: Encourage the relocation to the EBIA of industrial uses that have outgrown or are incompatible with locations in other parts of the City.

GOAL 2: OPTIMIZE INFRASTRUCTURE INVESTMENTS

To optimize existing and future capital investment by focusing investment on strategic improvements and locations in order to ensure planned, cost-efficient development and orderly long term expansion.

Objective: Identify an infrastructure strategy for servicing identified nodes and corridors to maximize cost efficiencies and capital investment.

Objective: Provide development options for businesses with varying servicing requirements.

Objective: Facilitate the use of reclaimed water as an option for industries in close proximity to the wastewater treatment plant.

GOAL 3. ATTRACT A WIDE MARKET THROUGH PROVISION OF SITE CHOICE

To attract a variety of industrial users by having a rolling supply of lots of varying sizes and servicing characteristics.

Objective: Enable a variety of parcels at different locations, sizes, costs and levels of service.

Objective: Provide larger parcels at key locations to attract large-scale, land-intensive industrial users.

Objective: Promote the EIBA on the basis of targeted markets and industrial cluster opportunities specific to each particular node.

GOAL 4. PROTECT AND ENHANCE MULTI-MODAL TRANSPORTATION INFRASTRUCTURE

To improve the connectivity of the area by developing a safe and efficient multi-modal transportation system and by focusing infrastructure upgrades on needed improvements to critical network components where identified by traffic- and transportation-related research and analysis.

Objective: Maintain the operational integrity of PTH 110 and EBIA arterial streets.

Objective: Develop a collector and local street system that integrates safely and efficiently with the arterial network.

Objective: Provide for safe and user-friendly active transportation and transit facilities.

Objective: Endeavor to reserve large parcels adjacent to rail lines for businesses requiring rail access.

GOAL 5. CREATE AN ATTRACTIVE WORK ENVIRONMENT

To foster the development of a high quality employment environment that addresses the needs of business employees and customers and incorporates the environmental features of the area.

Objective: Integrate natural features, wetlands and open spaces into future development and mitigate development impacts on environmentally sensitive species and areas.

Objective: Facilitate the development of sites and trails identified in the Green Space Master Plan for future community recreation and active transportation.

Objective: Identify strategic locations for complimentary retail, office, services and recreation uses.

GOAL 6: RECOGNIZE AND PROTECT CONTRIBUTIONS OF EXISTING USES

To prevent development within the EBIA in locations that might impede the ongoing operations of existing businesses and industries.

Objective: Recognize the legal rights and/or agreements of existing businesses that may pertain to access to, or use of, EBIA resources and municipal services.

Objective: Work with land owners to identify where land holdings may be made available or optimized for future development.

Objective: Promote the mining of high value aggregate resources and the reclamation of abandoned pits to make way for future development.

3.0 LAND USE CONCEPT

This part of the Plan outlines the policies for specific land use designations within the East Brandon Industrial Area. Development applications will be assessed against the policies of the industrial area in which the development is located, as identified in Figure 3: Land Use.

3.1 FULL SERVICE AREA "A" (FS-A)

3.1.1 Intent

The FS-A designation is intended to accommodate lower impact, general industrial development and supportive commercial and other compatible non-industrial uses in a fully serviced industrial park environment with paved roads and an appropriate standard of site development and appearance depending upon location, public visibility and exposure to high traffic routes. Development of lower impact uses in these areas is intended to create a transition zone between the residential neighbourhoods to the west and the higher impact industrial uses that will be accommodated in the balance of the EBIA to the east. Land drainage will be piped with on-site storage where required.

The FS-A designation applies to two (2) industrial nodes:

i. Victoria Avenue Node (FS-A North): This is a 128 hectare (316 acre) area in the northwest portion of the EBIA along Victoria Avenue East between 17th Street East and 33rd Street East. The area is currently serviceable with sewer and water. A subdivision plan for Sub-Development Area #2 has been prepared for lands under public ownership within the
    a. Victoria Avenue Node that, if registered, will provide smaller lots, ranging from 0.1 to 1.6 hectares (0.25 to 4 acres) that would accommodate smaller scale businesses and contractors.

ii. Richmond Park Node (FS-A South): This is a 235 hectare (582 acre) area in the southwest portion of the EBIA that expands the existing Richmond Industrial Park southward beyond Granite Road and eastward across 17th Street East. The area is already partially serviced with sewer and water installed along Park Avenue East and Granite Road. Lots sizes in the range of 2.0 to 4 hectares (5 to 10 acres) will accommodate a variety of smaller scale, low impact industrial businesses. The west side of the FS-A South area abuts approximately 270 acres of land designated Residential under the Brandon and Area Planning District (BADP) Development Plan, in which case appropriate industrial buffering will be required.

3.1.2 Primary Uses

Industrial, supportive retail, and service commercial uses should be the predominant land uses within the FS-A designated areas.

3.1.3 Complimentary Uses

The planned industrial park environment of the FS-A designation supports a range of other uses that may be complimentary to the lower impact industrial development envisioned, including:

i. Office uses;
ii. Vocational schools; and,
iii. Recreational uses.

3.1.4 Restricted Uses

The following uses are not permitted in the FS-A designation:

i. Residential uses;
ii. Space-intensive land uses that will not require an "urban" level of water and wastewater services (e.g. uses with a large outdoor storage component, such as impound lots and salvage yards);
iii. Heavy industrial uses, in particular those that handle or store potentially hazardous materials goods; and,
iv. New or expanded aggregate extraction operations.

3.1.5 Office, Retail and Service Uses

Office, retail and service commercial businesses that cater to the daily needs of employees should be clustered for convenience to encourage the creation of activity nodes. Considerations for locating these uses include:

i. Developing a concentration of complimentary uses at key intersections or along collectors and arterials; and,
ii. Directing office uses to high visibility areas, transit routes and/or to locations adjacent to recreation or park facilities.

3.2 FULL SERVICE AREA "B" (FS-B)

3.2.1 Intent

The FS-B designation is intended to accommodate a wide range of serviced, "General" to "Heavy" industrial development and businesses with larger land requirements. The FS-B designation covers approximately 555 hectares (1,372 acres) of land that provide convenient access to PTH 110 and offer the potential for rail service. Roads may be paved or gravel constructed to an industrial standard. Land drainage will be managed primarily with swales and ditches with on-site detention on larger lots or areas with large expanses of hard surfacing.

The FS-B designation covers a large area that includes two primary industrial development nodes:

i. PTH 110 Node: This node is comprised of lands surrounding the intersection of PTH 110 and Richmond Ave East, some of which has been subdivided and zoned for heavy industry. Proximity to the intersection of these two city truck routes makes this node well

positioned to attract businesses that move goods by truck. Medium lot sizes ranging from 2 to 4 hectares (5 to 10 acres) are anticipated for new subdivisions within this node.

ii. Richmond East Node: Large land parcels surrounding the intersection of 65th Street East and Richmond Avenue East hold the potential for large-scale, "Heavy" industrial uses in the food processing and agri-business sectors. The area will also support businesses that could potentially use reclaimed wastewater from the nearby municipal wastewater treatment plant. This area is accessible to both CP and CN rail lines. Lot sizes of 4 hectares (10 acres) or more are anticipated in new subdivisions within this node.

3.2.2 Primary Uses

Industrial uses should be the predominant use within the FS-B designation. Due to existing heavy industry in the area and its more remote location well removed from residential and commercial development, uses that may pose a known risk to the health may be accommodated.

3.2.3 Complimentary Uses

Limited commercial development is appropriate in this area, such as businesses serving the trucking industry and contractors involved in the operation and maintenance of the major industries within the EBIA. Development of supportive local retail and services uses that cater to the daily needs of employees may be allowed if compatible and non-disruptive to adjacent industrial businesses.

3.2.4 Restricted Uses

To protect existing operations in the FS-B area, incompatible urban uses will not be permitted within the FS-B designation, including:

i) Residential uses;
ii) Office, unless ancillary to an industrial use;
iii) Institutional; and
iv) Recreational uses.

3.2.5 Retention of Large Parcels

To support the retention of large, consolidated parcels of land that can accommodate large scale employment uses, subdivision of lots less than 2 hectares (5 acres) may not be permitted unless natural or manmade development constraints limit the creation of large-lot subdivisions.

3.3 PARTIAL SERVICE AREA (PS)

3.3.1 Intent

The Partial Service designation is intended for "General" and "Heavy" industrial uses for which municipal sewer and water services are not essential, although trunk services that are planned to traverse the area may permit local servicing if warranted in future. In the meantime, businesses will be required to operate with private sewer and water services including holding

tanks for water and pump-outs or septic fields for wastewater if approved by the City. Due to limitations of the underlying aquifer, groundwater is not anticipated to be a feasible industrial water source for new development within the PS area. Local roads in the PS area may be gravel or paved, as determined by the City Engineer, and constructed to an industrial standard. The PS area spans approximately 421 gross hectares (1,040 gross acres) of land, or 15.5% of the EBIA, including lands that may be undevelopable for economic or environmental reasons.

3.3.2 Primary Uses

Industrial uses should be the predominant use within the PS designation. Significant aggregate potential in this area may require that aggregate be mined out and the land remediated prior to development for other industrial uses.

3.3.3 Complimentary Uses

The extensive presence of wetlands in this designation may be suitable for nature-oriented recreation facilities such as trails, boardwalks and observation areas.

3.3.4 Restricted Uses

Residential uses are not permitted in the PS designation.

3.4 UNSERVICED AREA (US)

3.4.1 Intent

The Unserviced Area designation is intended for “General” to “Heavy” industrial development. No municipal services are planned for this area – all water, wastewater, land drainage, and fire protection must be handled privately onsite. Additional private wells are not allowed within the EBIA due to the limitations of the underlying aquifer. Local roads may be gravel. The US area spans approximately 365 hectares (902 acres) of land, or 13.5% of the EBIA, much of which is occupied by gravel pits. Substantial remediation will be required for industrial development to occur within the US area beyond scattered frontage development on existing road allowances.

3.4.2 Primary Uses

Industrial uses should be the predominant use within the US designation, in particular aggregate extraction operations and un-serviced uses that have large outdoor storage needs.

3.4.3 Complimentary Uses

The extensive presence of wetlands in this designation may be suitable for nature-oriented recreation facilities such as trails, boardwalks and observation areas.

Agricultural activities may be permitted as an interim use of land.

3.4.4 Restricted Uses

Residential uses are not permitted in the US designation.

3.5 LIMITED DEVELOPMENT AREA (LD)

3.5.1 Intent

The Limited Development Area spans approximately 1,004 gross hectares (2,481 gross acres), or 37.1 % of the EBIA. Most of the land within the Limited Development (LD) area is occupied by existing, space-intensive industries and businesses, permanent wetlands, the Assiniboine River flood plain, and public utilities like the City landfill and water and wastewater plants. Existing industries have large land holdings that provide a buffer zone around their plans. Applications for land subdivision may be allowed and will be reviewed on a case-by-case basis. The lands within the LD area are serviceable with sewer and water but partial servicing may be allowed depending upon the use. New roads within the LD area may be gravel or paved depending upon the location and the nature of the traffic as determined by the City Engineer. Land drainage will be surface via ditches and on-site storm water detention facilities where required as determined by the City Engineer.

3.5.2 Primary Uses

Industrial use should be the predominant use within the LD designation. Significant aggregate potential in this area may require that aggregate be mined out prior to development of other industrial uses.

3.5.3 Complimentary Uses

The extensive presence of wetlands in this designation may be suitable for nature-oriented recreation facilities such as nature trails, boardwalks and observation areas.

3.5.4 Restricted Uses

To maximize the opportunity for industrial expansion and development, permanent, non-industrial uses will not be permitted.

3.6 PARKS AND RECREATION

3.6.1 Intent

The Parks and Recreation designation applies to lands currently used or identified for future public park and outdoor recreation uses that serve the broader Brandon community as well as workers within the EBIA. The following areas are designated for recreational use, as identified in the Brandon Greenspace Master Plan:

i. Decommissioned Landfill Site: The City of Brandon owns an abandoned landfill site spanning 12 hectares (30 acres) in the southwest corner of the EBIA on the west side of 17th Street north of Patricia Avenue. Use of this decommissioned landfill and methane gas site is limited to recreation use as identified in the Brandon Greenspace Master Plan.

ii. Millennium Park: Millennium Park is located on approximately 28.7 hectares (71 acres) of land owned by Koch industries. The park contains eight (8) baseball diamonds, four of which are lit. The park is also the future site of the Boyd football field. The park is a major

summer recreation destination for Brandonites and should be well connected to the larger City via public transit and AT paths as recommended by the Brandon Greenspace Master Plan.

iii. Eastview Landfill: The 64.7 hectare (160 acre), city-owned Eastview Landfill on the south side of Victoria Avenue East currently has additional capacity and the City anticipates the site will be expanded to enable its continued use. Policy 6.2.13 of the Brandon Greenspace Master Plan recommends future development of a community greenspace that incorporates a trail system, overlook and seating area once the landfill reaches capacity and the site is remediated.

iv. Assiniboine River Corridor**:** To support the City's vision for a continuous recreational corridor along the Assiniboine River, the Brandon Greenspace Master Plan recommends that land use on the low-lying lands adjacent to the river be limited to complimentary low-impact uses such as outdoor recreation, natural open space and trails, and that the City acquire additional flood plain lands as they become available from private owners.

3.6.2 Primary Uses

Public parks and outdoor recreation uses should be the predominant uses within the Parks and Recreation designation, such as passive nature trials and parks to more intensive sports fields and active transportation facilities, where appropriate.

3.6.3 Complimentary Uses

Small-scale, ancillary retail and service uses, such as food stands and bike rental kiosks, may be appropriate for the Parks and Recreation designation, with the exception that permanent structures are not permitted within the Designated Flood Area (DFA) of the Assiniboine River.

For lands designated along the Assiniboine River Corridor, only structures ancillary to low-impact public park and outdoor recreation uses will be permitted, such as gazebos, information kiosks, mobile or moveable equipment and structures, rain shelters and warming huts, public washroom facilities, and equipment storage and change room facilities.

3.6.4 Land Dedication

Where lands adjacent to the Assiniboine River are being subdivided, the City may require the dedication of public reserve lands or special purpose easements adjacent to the river for the purpose of extending/connecting existing trails and pathways within the EBIA as recommended by the Brandon Greenspace Master Plan.

4.0 TRANSPORTATION

This Part of the Plan provides for the development of a transportation network that is safe and efficient for trucks, transit, private vehicles, rail, cyclists and pedestrians. Improvements identified in the Plan are based on the recommendations of a Traffic Impact Assessment (TIA) conducted for the EBIA, which anticipates increases in traffic volume from the development envisioned by this Plan. Figure 4: Transportation Network identifies existing and proposed transportation infrastructure. The Traffic Impact Assessment (TIA) on which the following information and policies are based is attached as Schedule "B" to this secondary plan.

4.1 ROADS

The road network within the EBIA consists of Provincial Trunk Highway No. 110 (PTH 110), which provides a critical link for traffic to and through the area, as well as the arterials, collectors and internal roads which accommodate local traffic. The general alignment of the road network is shown on Figure 4. Key improvements to the road network needed to support the development envisioned in this Plan include intersection treatments on PTH 110 and the twinning of Richmond Avenue East.

4.1.1 PTH 110

PTH 110 is classified as an undivided expressway under the jurisdiction of the Province of Manitoba. To preserve acceptable traffic operations around south-eastern Brandon, two signalized intersections are recommended on PTH 110, at Richmond Avenue East and at Victoria Avenue East, to address the anticipated increases in traffic volume as a result of the development envisioned in this Plan. As outlined in the Traffic Impact Assessment, these intersection improvements will be required when traffic volumes reach levels that are deemed to cause a critical reduction in service or intersection operation and capacity.

To ensure development adjacent to PTH 110 is compatible and does not negatively impact the safe and efficient operation of the highway, consultation with Manitoba Infrastructure is required before adjacent development may be permitted.

4.1.2 Access Management

To minimize traffic congestion and potential traffic hazards, access to PTH 110 and to Richmond Avenue East should be limited to controlled intersections where possible. Should additional access be required, service roads or shared approaches are recommended.

Development of new accesses on arterials (Victoria East, Richmond East and Patricia Avenues) should be appropriately separated from roadway intersections in order to minimize traffic hazards.

4.1.3 Road Standards

Roads shall be designed in accordance with Municipal Standards. Roads within the FS-A designations should be paved. Roads within other designations may be paved or gravel as determined by the City Engineer.

4.1.4 Dangerous Goods and Heavy Truck Routes

Dangerous goods routes in the EBIA include:

- PTH 110;
- Richmond Avenue East;
- 17th Street East, from 110 to just south of Victoria Avenue East; and
- 65th Street East, from Richmond Avenue East to Patricia Avenue.

Developments that handle dangerous goods should be directed to locations along these routes, as a priority.

Heavy truck routes in the EBIA include:

- PTH 110;
- Richmond Avenue East; and
- 65th Street East, from Richmond Avenue East to Patricia Avenue.

Developments that handle dense commodities should be directed to locations along these priority routes. Upgrades to Patricia Avenue are recommended to accommodate gravel hauling from quarry operations in the southeastern part of the EBIA.

4.2 TRANSIT

An existing transit route along Richmond Avenue East provides service to the FS-B area. As development builds out, existing transit service may be increased and additional service to key growth nodes may be provided, such as by extending the Richmond route beyond the Maple Leaf plan and adding service on 17th Street East south to PTH 110.

Proposed transit improvements are identified on Figure 4 and in Schedule "B." Improvements are conceptual and will be determined by the City Engineer as build out occurs and local road alignments are established.

4.2.1 Transit Stop Distribution

Planning for future transit stops should prioritize locations that:

i. Minimize walking distances from businesses;
ii. Support higher density commercial and business-related development; and
iii. Offer high-visibility waiting locations.

Transit shelters should be provided at all transit stops.

4.2.2 Extension of Transit Service

The location of a large-scale businesses or business clusters that generate high employment may warrant the introduction or extension of transit service to a developing area, as would increasing traffic volumes along key corridors.

4.3 ACTIVE TRANSPORTATION

To increase the accessibility and connectivity of the EBIA to the rest of Brandon and provide alternative means of travel for commuters, this Secondary Plan promotes the incorporation and enhancement of pedestrian and bicycle facilities and the development of an interconnected trail and pedestrian circulation system.

4.3.1 Regional Trails

The regional trails identified in Figure 4, are part of Brandon's existing and planned Active Transportation System, as set out in the Brandon Greenspace Master Plan (p.49).

The alignment of regional trails will prioritize locations:

i. Within public reserves along the Assiniboine River;
ii. Within road rights-of-way along PTH 110, Richmond Avenue East, Victoria Avenue East and 17th Street East;
iii. Adjacent to natural features, where they are present; and
iv. That avoid the need for separate pedestrian/bicycle overpasses or underpasses (in relation to rail and road crossings).

Trail locations within or adjacent to railway right-of-ways are not recommended.

4.3.2 Trail Standards

As per the Brandon Greenspace Master Plan, trail widths should be a minimum of 3.0 meters in width in order to accommodate shared use by pedestrians and cyclists. A 3.0-meter buffer between a trail and the roadway should be provided.

4.3.3 Pedestrian & Bicycle Facilities

Developments within an FS-A designation and in locations adjacent to regional trails are encouraged to provide bicycle parking and pedestrian/bicycle connections, in particular where developments can connect to:

i. Existing or planned transit stops;
ii. Existing or future trail systems along the Assiniboine River, Victoria Avenue East, and Richmond Avenue East);
iii. Existing or future recreation sites like sports fields; and
iv. Existing greenspaces and natural areas like wooded areas and wetlands.

4.4 RAIL

The presence of both main line and spur line rail infrastructure in the EBIA provides an opportunity for businesses reliant on rail shipping and requires controls to minimize incompatible development. In general, businesses requiring rail access should be located close to existing rail lines to minimize the need for additional spurs which require right-of-way acquisition and may create conflict points with roadways.

4.4.1 Rail-related Development

Where possible, rail-related land use and development will be promoted in areas adjacent to existing rail lines and spur lines within the EBIA. To effectively utilize this infrastructure and provide attractive locations for industries dependent on rail shipping, the City will encourage the retention of large development parcels adjacent to or bisected by rail lines in the EBIA. The joint use of existing private spur lines is encouraged.

4.4.2 Development Setbacks

To minimize the potential impacts of rail activity, appropriate mitigating measures, such as development setbacks, berming or fencing, may be required for certain developments adjacent to rail lines in the EBIA. Land uses sensitive to noise and vibration should not be located close proximity to rail line. Development adjacent to rail lines must comply with Schedule “A” of the City of Brandon Zoning By-Law Schedule, Section 71: Railway Protection Overlay Zone.

4.4.3 Rail Crossings

Rail crossings in the EBIA shall comply with the Transport Canada Grade Crossing Regulations as they relate to road approaches, crossing surfaces, sightlines, and traffic control. Gates are required for rails within 60 meters (197 feet) of a traffic signal.

5.0 SERVICING

This Part of the Plan provides servicing policies for the phased build-out of the East Brandon Industrial Area (EBIA). Provisions related to the phasing and financing of municipal servicing investments can be found in Schedule F: Implementation – Capital Improvement Plan. The proposed EBIA infrastructure network is illustrated in Figure 5: Conceptual Roads and Servicing.

5.1 SANITARY SEWER (WASTEWATER) MANAGEMENT

5.1.1 Intent

Sanitary services within the EBIA will be managed through a combination of municipal piped services and private onsite systems. The type of service provided will be dependent on the location of the development as follows:

i. Development within the FS-A and FS-B designations will be serviced by piped municipal sanitary sewer;
ii. Development within the PS and US designations will be serviced by private onsite sanitary wastewater management systems compliant with Brandon and provincial requirements; and,
iii. Development within the LD designation will be serviced by existing sanitary wastewater management systems.

5.1.2 Municipal Sewer Service

In locations where piped municipal sanitary sewer service is provided:

i. New developments will be required to connect to the municipal system at the time of development, unless it can be demonstrated that it is not possible or practical due to physical distance or barriers. In such cases, developments which have minimal requirements for wastewater disposal may be serviced by small-scale onsite wastewater management systems (OWMS), subject to any required provincial approvals.
ii. Existing development must connect to the municipal system within two years as per Water and Wastewater Control By-Law No. 5957/114/, Section 22.
iii. Developments that generate significant volumes of wastewater or have special waste treatment needs that may impact the capacity and function of the municipal collection or treatment system will not be permitted, unless, at the user's expense, appropriate measures are undertaken to enhance the municipal system. In these instances, an engineering review will be required along with specialized pre-treatment installations to deal with any unique wastewater problems.

Any necessary rights-of-way or easements for public services will be provided to the City of Brandon through subdivision.

5.1.3 Planned Sewer Extensions

In locations where the extension of existing and/or proposed piped sanitary sewer infrastructure is planned (see Figure 5 for conceptual alignment), the subdivision of land for un-serviced or limited service development should not be permitted. This will ensure that future servicing can be provided in a logical, stepwise manner and that large parcels are preserved for potential large-scale serviced development.

5.1.4 Onsite Wastewater Management

Developments intended to be serviced by private, onsite sanitary wastewater management systems (OWMS) should locate in the PS and US designations, where piped municipal sewer is not anticipated. All onsite sanitary wastewater management systems must be developed in accordance with City and Provincial regulations. Individual lot owners will be responsible for the collection and disposal of sewage at the municipal treatment plant.

5.1.5 Wastewater Treatment

Development within FS-B will exceed the existing wastewater pretreatment facility capacity. FS-B sanitary sewer infrastructure must therefore be routed directly to the WWTP and require a pre-screening facility upgrade prior to any new connections being approved.

5.2 STORMWATER MANAGEMENT

5.2.1 Intent

Stormwater will be managed either centrally or site specifically, as follows:

- FS-A - Development Sub-areas 1 and 3: Site based stormwater management. Post development site runoff must not exceed pre-development runoff.
- FS-A – Development Sub-area 2: Central stormwater management. Drainage may be achieved in ditching and discharged to Victoria Ave. E drain. Drainage study and permitting will be required.
- FS-A – Development Sub-areas 4 and 5: Central stormwater management. Drainage to be retained in retention pond Area 5, south east of 17th St. E and Richmond Ave. E. Pond will discharge to planned LDS outlet.
- FS-B – Site-based stormwater management. Post-development site runoff must not exceed pre-development runoff.
- PS/US/LD – Site-based stormwater management. Post-development site runoff must not exceed pre-development runoff. In LD designation, existing LDS may be utilized.

City of Brandon Municipal Standards shall be referenced for design requirements.

5.2.2 Stormwater Drainage Study/Plan

To identify potential impacts on the municipal system and surrounding properties, the City will require a drainage study, prepared by a professional Engineer, and mandate that drainage plans be submitted for developments within all areas. To reduce loading on the stormwater infrastructure, drainage plans are encouraged to use approved practices and measures that involve the retention/detention and absorption of runoff.

5.2.3 Private Stormwater Management Facilities

Centralized stormwater management systems intended to serve multiple areas are encouraged. Landowners are encouraged to cooperate in the location, design, timing and financing of centralized stormwater management systems to the satisfaction of the city through the development approval process.

5.2.4 Incorporate Wetlands

The release of treated stormwater into existing wetlands may be permitted if it can be demonstrated, to the satisfaction of the provincial regulatory authority, that it will not alter the natural state of the wetland, create a net loss of wetlands, or impair the function and quality of the habitat.

5.3 POTABLE WATER SUPPLY

5.3.1 Intent

Water supply within the EBIA will be provided through a combination of municipal piped services and private onsite systems. The type of service provided will be dependent on the location of the development as follows:

i. Development within the FS-A and FSA-B designations and PS designation will be serviced by piped municipal water;
ii. Development within the US designation will be serviced by private onsite systems; and,
iii. Development within the LS designation will be serviced by existing systems.

5.3.2 Municipal Water Service

In locations where piped municipal service is provided:

i. New developments will be required to connect to the municipal system at the time of development, unless it can be demonstrated that it is not possible or practical due to physical distance or barriers, in which case an alternative water system (holding tanks or septic fields) will be considered, as approved by the City and provincial agencies.
ii. Existing development must connect to the municipal system within two years as per Water and Wastewater Control By-Law No. 5957/114/, Section 22.
iii. Developments that have extraordinary requirements for water supply, such as high demand volumes, that may impact the capacity or function of the municipal

distribution or treatment system will not be permitted, unless, at the user's expense, appropriate measures are undertaken to enhance the municipal system. In these instances, an engineering review will be required to determine what measures will be required.

Any necessary rights-of-way and easements will be provided to the City of Brandon through the subdivision approval process.

5.3.3 Planned Water Extensions

In locations where the extension of existing and/or proposed piped municipal water mains are planned (see Figure 5 for conceptual alignment), the subdivision of land for unserviced or limited service development should not be permitted. This will ensure that future servicing can be provided in a logical, stepwise manner and that large parcels are preserved for potential large-scale serviced development.

5.3.4 Onsite Water Supply

Developments intended to be serviced by private water systems will be required to locate on lands designed unserviced (US) where piped municipal water is not anticipated. All private water systems must be developed in accordance with provincial regulations and as approved by the City of Brandon. Individual lot owners within the US designation will be responsible for their own water supply.

Developments that have a high water demand or are considered "wet industries" will not be permitted, unless appropriate measures are undertaken to demonstrate that a private water system has sufficient capacity or to extend and enhance the municipal system, at the user's expense. In these instances, an engineering review will be required to determine what measures will be required.

5.4 NON-POTABLE WATER SUPPLY (RECLAIMED WATER)

Reclaimed water means wastewater that has been treated at the WWTP to a specific standard and distributed for a specific use. Reclaimed water supply within the EBIA will be provided through a municipal non-potable piped service. The type of service provided will be dependent on the location of the development as follows:

i. Development within the FS-B designation may be serviced by piped reclaimed water; specifically, in in lots adjacent to WW line in Area 12 (206 acres).
ii. Reclaimed water uses to be approved by the City and to the satisfaction of the provincial regulatory authority.

FS-B reclaimed water distribution will require dedicated storage and pumping facilities at the WWTP prior to any new connections being approved.

5.5 SHALLOW UTILITIES

Shallow utilities, natural gas, telecommunications, and electrical service, should be constructed prior to, or in conjunction with, development. The service providers should be contacted directly for system network information. The EBIA is currently served by the following major utilities.

5.5.1 Natural Gas Service

Natural gas supply will be provided within the EBIA as determined by the utility in response to the requirements of individual businesses. Existing gas lines within the EBIA are conceptually illustrated in Reference Map #4: Gas Service.

5.5.3 Telecommunications Services

Phone, internet and cable service to the EBIA is provided by Bell-MTS and Westman Communications. In addition, Shaw's transcontinental fibre optic line runs along the north side of the CP main line and the City of Brandon has an existing fibre line to the north of Victoria Avenue. The EBIA is served by both overhead line and fibre optic as conceptually illustrated in Reference Map #3: Telecommunications.

5.5.3 Electrical Service

All development with the EBIA will be provided electrical service from Manitoba Hydro. Within the FS-A designations, hydro service will be provided as a standard industrial service to new development. Electrical utility distribution and servicing for development within the other designations will be coordinated by Manitoba Hydro at the request of the developer. Existing local electrical distribution lines within the EBIA major road rights-of-way are conceptually illustrated in Reference Map #5: Electrical Service.

5.6 SERVICE & UTILITY CORRIDORS

To accommodate municipal services and shallow utilities, utility rights-of-way and easements must be provided, as determined necessary. Utilities will need to be constructed prior to or in conjunction with development. Rights-of-way and easements will need to be acquired to accommodate the extension and interconnection of utility services. Utility alignments will be identified at the development review stage and associated easements and rights-of-way will be obtained through the development approvals and subdivision process.

6.0 ENVIRONMENT

The protection of sensitive lands and the sustainable use and development of natural resources such as groundwater and aggregate is important for the future growth and development of the EBIA. The reliance of the City of Brandon and major industrial users on groundwater requires that the quality and quantity of this resource be maintained. Extensive aggregate resources are a valuable interim land use that can be compatible with industrial development and should be encouraged where appropriate. Wetlands and wildlife habitats, including habitats for species-at-risk, are natural features that provide valuable ecological functions that should be conserved and, where appropriate, integrated into future developments as an amenity. Environmental features and considerations are conceptually identified in Figure 6a: Environmental Considerations.

6.1 GROUNDWATER MANAGEMENT

The primary aquifer underlying the EBIA is referred to as the Brandon Channel Aquifer (BCA). The licensed industrial groundwater users in the EBIA withdraw water from the BCA. The BCA is also overlain by a shallow aquifer found within coarse-grained soils. This aquifer is generally not suitable for industrial use due to limited recovery and quality. The porous nature of the soils over the BCA makes it susceptible to contamination from sources such as sewage, petroleum products, fertilizers, manure, and pesticides. The capacity of the aquifer is not fully defined; however, it is understood to be approaching its sustainable limit. Allocations for new users are not expected to be easy to obtain due to the limited capacity; therefore, groundwater is not anticipated to be a feasible industrial water source for new developments within the EBIA.

6.1.1 Groundwater Allocation

In general, new industrial development should not be planned on the assumption that groundwater from the BCA is available. Any development proposal that includes groundwater withdrawal would need to be approved by the provincial regulatory authority which, at the time of writing, is the Water Stewardship Division of the Manitoba Sustainable Development Department, and supported by detailed hydrogeological studies that demonstrate additional water can be withdrawn from the BCA without affecting the existing licensed users.

6.1.2 Contamination Risk

To prevent the infiltration of contaminants into the shallow aquifer and eventually the BCA, proposed surface and subsurface land use that includes the risk of contamination will require an assessment of the potential risk and identification of necessary mitigation measures prior to approval of the development. In most cases, development proposals that include a contamination risk have been identified by the province in the Classes of Development Regulation and are required to undergo an Environmental Assessment in accordance with the provincial Environmental Licensing process. In addition, developments that include underground and aboveground storage tanks above a certain size that contain petroleum and/or chemicals are required to obtain approval from the Province prior to construction, and will be required to have appropriate spill prevention and containment systems and protocols.

6.1.3 Mitigation Measure

Where a contamination risk to the groundwater is confirmed, appropriate safeguards to manage potential groundwater contaminants must be implemented, as required by the provincial regulatory authority.

6.2 WETLANDS

Extensive natural wetlands and constructed drainage features are present throughout the EBIA. These may be permanent, semi-permanent or seasonal areas of standing water and may also include unique vegetative cover and suitable habitat for a variety of aquatic and terrestrial species. Due to the valuable ecological and habitat functions provided by both natural and constructed wetlands, these features are to be retained and where possible, integrated into future development, as determined through the completion of a site-specific wetland assessments if or as required by the Province. The EBIA Secondary Plan identifies the presence of "water bodies" on Figure 6a based on provincial GIS data. The map is for reference only, and the determination of the extent and type of natural wetlands will require wetland assessments undertaken by qualified environmental scientists as required by the provincial regulatory authority.

6.2.1 Identification of Wetlands

Development of lands within or adjacent to wetland areas may require the preparation of a wetland assessment as a condition of approval in order to determine the nature, extent and function of the natural drainage feature. The wetland assessment will be submitted to the province as part of the land drainage approval process and for a determination as to what extent new land improvements may or may not alter the natural state of the wetland.

6.2.2 Wetland Conservation

As per policy 6.2.6 of the Brandon and Area Planning District Development Plan and in accordance with *The Planning Act*, where a parcel of land that is being subdivided for development is determined to contain a natural drainage feature, such as a wetland, the City may require the area of land containing the natural drainage feature to be dedicated as a public reserve and designated as Parks, Recreation and Open Space. Where the City does not require the land to be dedicated as public reserve, other conservation measures may be used, such as a conservation easement on title, the application of development setbacks and, if implemented in future, financial incentives.

6.2.3 No Net Loss Policy

Where wetland areas may be unavoidably compromised or altered due to the planned development envisioned by this Secondary Plan, the City may support a 'no net loss policy' should such a policy be adopted and administered by the Province. Such a policy may provide for the equivalent construction, restoration and/or protection of wetlands in other areas of the EBIA using tools such as incentives, set-back distances, and property acquisition of wetland areas for set-aside as public reserves.

6.3 SURFACE WATER AND RIPARIAN AREAS

The Assiniboine River bounds the EBIA area to the north and east and includes areas of river bottom forest within the riparian area. The river provides an alternative source to groundwater for industrial water users within the EBIA and it is expected that surface water allocations are available. Protection of fish and fish habitat is provided by federal and provincial legislation and the allocation and licensing of surface water resources is administered, at the time of writing, by Manitoba Sustainable Development. Due to the valuable ecological and habitat functions provided by this surface water and associated riparian areas, development within the EBIA must be planned to protect this ecological system.

6.3.1 Impact Assessment

Proposals for withdrawal of surface water are processed by the provincial regulatory authority. Any potential surface water use for industrial purposes would need to be sustainable in terms of the required withdrawal based on provincial allocation limits and existing licenses granted to users of Assiniboine River water. Developments obtaining water from the Assiniboine River will need to demonstrate that the aquatic resource are protected during construction and operation of related equipment (typically through an Environmental Licensing process).

For developments within the EBIA that have the potential to adversely impact the Assiniboine River (through drainage, runoff, removal of riparian vegetation, etc.), the provincial regulatory authority may require the submission of a report by a qualified person assessing the risk to surface water and riparian areas with recommendations for appropriate mitigation measures to reduce and/or eliminate the potential risk.

6.4 SPECIES-AT-RISK

Federal and provincial legislation provides regulatory protection to species-at-risk (SAR) and/or listed species (endangered, threatened and species of special concern) and the presence of these species within the EBIA presents a constraint to development that can be addressed through avoidance and/or mitigation. Five species are known to be present in the EBIA, including one plant, three birds and one reptile. The quarter-section locations of such species are conceptually shown on Figure 6a: Environmental Considerations.

6.4.1 Impact Assessment

Species-at-risk are protected by legislation and any development within the EBIA must ensure that SAR and their habitat are not adversely impacted. As noted for groundwater, any development proposal within the EBIA that requires an Environmental License will include an assessment of the potential risk to SAR and the development of suitable mitigation measures to reduce the risk. The City may require an SAR impact assessment as a condition subdivision or rezoning approval to reduce the risk of encountering the SAR during construction. The Province provides guidance to developers by publishing prescribed set back distances for development near SAR (for bird species).

6.5 AGGREGATE RESOURCES

Extensive areas of the EBIA have been identified as having potential for medium- to high-quality aggregate. Figure 6b: Aggregate Resources identifies medium- and high-quality aggregate areas at a conceptual level along with active and dormant gravel pits. Due to their importance for infrastructure construction and urban development, aggregate deposits in the EBIA are a valuable resource to the City of Brandon and the Province. In general, this Secondary Plan is consistent with The Brandon and Area Planning District Development Plan and encourages the extraction of medium and high-quality aggregate before the development of conflicting surface uses.

However, surface development shall take precedence over aggregate extraction in areas planned for permanent full (drainage, wastewater, water) municipal services as new aggregate extraction is not compatible with will diminish the development potential of the serviced lands.

This Secondary Plan balances the need for protection of land for aggregate extraction with the need for serviced, industrial development land by clearly identifying the areas that are intended for serviced industrial development along with a phasing plan that will enable extraction to occur prior to development.

6.5.1 Full Service Areas

New surface development in “medium” and “high” quality aggregate areas on Figure 6b shall be permitted in planned fully serviced (FS-A and FS-B) designations, including the construction of buildings prior the extraction of the aggregate resource. To protect public and private investments, new aggregate operations shall not be permitted in FS-A and FS-B designations unless:

i. Staging of municipal servicing provides a suitable timeframe to complete aggregate extraction and post-extraction rehabilitation as an interim use (e.g. the land will not be serviced within the short (< 10 years) to medium (10 - 15 years) timeframe; or
ii. The aggregate operation will cover less than 35% of the parcel/lot, allowing the remainder of the lot to be developed for a compatible, serviced industrial use.

For both exceptions, the aggregate operation must be compatible with adjacent, existing uses.

6.5.1 Non Full Service Areas

Lands within the EBIA that are not intended for full servicing may be appropriate locations for aggregate extraction operations, including lands within the PS, US and LD designations.

In “medium” and “high” value aggregate areas only non-conflicting surfaces uses are permitted, unless the resource is determined by The Manitoba Mines Branch to be of low value or uneconomical to extract.

6.5.3 Existing Aggregate Operations

To ensure compatibility and minimize conflicts, where new development is located adjacent to an existing aggregate operation, the new development may be required to implement buffering and screening measures to mitigate the impacts of the existing aggregate operation.

6.5.4 Site Assessment

The establishment of a new or expansion of an existing aggregate extraction operation will require a development permit prior to start-up. Application for a development permit will require the submission of a site plan showing:

The total area to be utilized for extraction operations;

i. Separation distances between extraction areas and nearby features (such as roadways, surface water and non-resource developments);
ii. Proposed measures to mitigate conflicts (such as berms or buffers);
iii. Proposed access points to public roadways and major truck routes to be utilized; and
iv. The proposed quarry rehabilitation program as approved by the provincial regulatory authority.

6.5.5 Road Maintenance Agreement

As a condition of approval for an aggregate extraction operation, the City may require the operator to enter into an agreement to cost-share the maintenance of roads that will be impacted by heavy truck usage.

6.5.6 Rehabilitation

Once an aggregate extraction operation has ceased extraction activity, the land area shall be rehabilitated in accordance with Pit and Quarry Rehabilitation Program under the Manitoba Mines and Minerals Act. The Act requires that depleted pits and quarries be brought back to a condition that is safe, environmentally stable and compatible with adjoining lands. While each site is unique, the general standard includes sloping embankments and the spreading of available overburden and topsoil from stripped stockpiles over the surface. If land owners wish to initiate further site development, they must do so at their own expense.

6.6 EMISSIONS

6.6.1 Carbon Emissions

Implementation of Manitoba's new five-year Climate Plan includes a per-tonne carbon tax that is based on the quantity of greenhouse gasses emitted. The industrial development envisioned in this Secondary Plan may contribute to the total emissions produced by the City of Brandon.

i. To support the reduction of Brandon's carbon emissions overall and assist local industries in meeting any emissions 'cap', this Secondary Plan:
ii. Promotes lower-emitting means of transportation, such as cycling and mass transit, through the inclusion of active transportation and transit facilities; and,

iii. Facilitates the reduction of energy use by encouraging the waste outputs of one business be utilized as an energy input (fuel) for another business.
iv. Industries within the EBIA are encouraged to identify and measure their carbon footprints through an assessment of greenhouse gases emitted. Once the carbon footprint is measured, it will be easier for an industry to identify the types of measures that could be taken to minimize emissions.

6.6.2 Airborne Emissions

Developments that may have a detrimental effect on air quality from the emission of smoke, dust, harmful vapors, or other airborne particles or other harmful characteristics, will be encouraged to control emissions to the greatest extent possible, and will only be permitted at locations which minimize human exposure to these emissions.

6.7 METHANE GAS SITES

Three methane gas sites exist within the EBIA:

i. A city-owned, 12 hectare (30 acre) former (decommissioned) landfill located north of the Brandon Human Society in the designated FS-A South area;
ii. A 1-2 hectare (3-5 acre) site located on the south side of Richmond Avenue East in the designated PS area, on lands owned by the Rural Municipality of Cornwallis; and,
iii. The city-owned Eastview landfill, an active landfill site south of Victoria Avenue East in the designated LD area.

6.7.1 Development Control

Developments impacted by methane gas shall comply with the City of Brandon Methane Gas Site Policy (Policy Number 1004, effective date October 1, 2015), the purpose of which is to:

i. Establish methane risk zones and develop a procedure to determine the existence of methane gas and the boundaries of current and former landfill sites which are producing or may produce methane gas;
ii. Formalize requirements and criteria for development within each zone; and,
iii. Ensure continuous monitoring of established zones is undertaken to recognize and deal with any generation or migration of methane gas.

6.8 ASSINIBOINE RIVER FLOOD ZONE

Flooding along the Assiniboine River has had significant impact on both public and private investment in the City of Brandon. To reduce the risks to people and property, Brandon has in place a number of policies to limit development on flood prone lands (Brandon and Area Development Plan, City of Brandon Greenspace Master Plan, City of Brandon Assiniboine River Master Plan). Lands determined to present a flood risk, based on the 2014 flood record, are identified in Figure 6a.

6.8.1 Limited Use

As governed by the City of Brandon Zoning By-Law, land use in areas identified as flood prone is limited to natural open space, public park and outdoor recreation uses. Only minor structures associated with these uses may be permitted if they are impervious to water damage and provided the design of the structure is based on the flood of record and the placement does not inhibit the free flow of flood water.

6.9 CONTAMINATED AND IMPACTED SITES

The provincial regulatory authority maintains a database of sites associated with the administration of the Contaminated Sites Remediation Act, C.C.S.M. c. C205 (CSRA) and the Contaminated Sites Remediation Regulation 105/97, last amended MR 94/2014 (CSRR). There are currently three site classifications used:

i. Contaminated site - a site designated under the CSRA (Section 7(1)) which is contaminated at a level which poses a threat to human health or safety or to the environment;
ii. Impacted site - a site designated under the CSRA (Section 7(2)) which is contaminated at a level that may pose a threat to human health or safety or to the environment; and
iii. Listed site - a site where some type of information has been submitted to MSD and a file has been created. These can include sites where the impacts do not pose a concern, remediation has been completed, or further action is necessary.

Two impacted sites and five listed sites are present within the EBIA, as shown on Figure 6a. Additional contaminated or impacted sites may be present in the EBIA that are not currently identified. The presence of contaminated and/or impacted sites within the EBIA may constrain site development and some servicing (if contamination extends to areas required for underground utilities), until remediation and/or risk management of the sites is completed. Under the *Act*, owner/occupiers of sites identified as contaminated or impacted are required to prepare and implement remediation/risk management plans.

6.9.1 Detailed Investigation

As mandated by the Province, as a condition of development approval for lands that may have a contamination risk due to the nature and intensity of an existing or previous use, the owner/applicant may be required to:

i. Undertake an environmental Investigation to determine the presence of contamination, if any, and the type and extent of contamination, including if contamination extends beyond the property limits onto City-owned land; and
ii. Prepare a Remediation Plan, if necessary, for review and approval by the appropriate provincial authority.

Any property owner within the EBIA (current or future) that completes an Environmental Investigation (either as directed by the City or for their own purpose) and becomes aware that the property has concentrations of contaminants above the prescribed limits in the CSRR, must

submit the Environmental Investigation report to the provincial regulatory authority and prepare a Remediation Plan. Environmental Site Assessments and Remediation Plans must be prepared by an Environmental Professional.

6.9.2 Responsibility for Remediation

Investigation and remediation of a provincially designated contaminated and/or impacted site is the responsibility of the owner/occupier. In accordance with The Contaminated Sites Remediation Act (CSRA), where the responsibility for remediation is in dispute (land owner versus lessee/tenant, previous owner versus current owner, etc.), the owner/occupier may request that the Province adjudicate a "determination of responsibility" proceedings and issue a final determination as to the party/parties responsible for the remediation of the site(s).

6.9.3 Remediation Standards

If remediation is necessary as a result of the change of land use or redevelopment/development activities, it is the responsibility of the developer to remediate the site to the new land use criteria, or to eliminate the exposure pathway.
In determining the standard of remediation, land uses within the EBIA will generally be considered industrial and will require assessment and remediation/risk management to the industrial land use category as defined by the CSRA and CSRR. Any permitted commercial development will be assessed against the commercial land use category.

6.9.4 Brownfield Development Policy

Should opportunities arise to redevelop large scale contaminated/impacted sites, such "brownfield" development will be encouraged by the City, such as by promoting the use of existing soil remediation capability at the Eastview Landfill, or by providing incentives to redevelop brownfields as allowed for under the Brownfield Financial Assistance Program, By-Law No. 7187.

6.10 HERITAGE RESOURCES

Heritage resources are protected under The Heritage Resources Act of the Province of Manitoba. Heritage resources include a "heritage site, object and any work or assembly of works of nature or of human endeavor that is of value for its archaeological, paleontological, pre-historic, historic, cultural, natural, scientific or aesthetic features and may be in the form of sites or objects or a combination thereof."

Manitoba Historic Resources Branch (HRB) identified the potential for heritage resources in all quarter-sections within the EBIA with the exception of NW 17-10-18 and NE 7-10-18. Manitoba HRB provided recommendations for completion of either a Heritage Resource Impact Assessment (HRIA) as prescribed under the Act, or completion of field surveys to pre-screen the Identified quarter sections, depending on the type of development proposed. In addition, a specific additional heritage site was identified from records published by the Manitoba Historical Society, specifically the rail bridge abutment located in the Assiniboine River at the east end of Victoria Avenue East.

6.10.1 Identification of Heritage Resources

The City may require a HRIA or a field survey for an undeveloped site which may contain heritage resources as a condition subdivision or rezoning approval, to determine the extent of any heritage resources present and mitigation measures required to protect heritage resources prior to development. The intent of completing a HRIA or a field survey is to reduce the risk of encountering any artifacts of heritage significance during construction.

A Heritage Permit is required from MB HRB prior to the completion of the required HRIA or field surveys. The results of the HRIA and/or field surveys should be submitted to the provincial regulatory authority prior to any development in the EBIA, with the exception of the exempt quarter sections NW 17-10-18 and NE 7-10-18.

6.10.2 Heritage Resource Conservation

All identified heritage resources resulting from completion of the HRIA and/or field surveys must be managed in accordance with the requirements of the Heritage Resources Act.

7.0 DESIGN GUIDELINES

To establish a positive visual identity and appeal to prospective businesses, the EBIA Secondary Plan provides for a higher standard of site development on or in:

i. *High Visibility Corridors* located along main transportation routes which are highly visible to motorist and the general public; and,
ii. Full Service (FS-A) areas located in close proximity to residential development and intended for general industrial uses.

High Visibility Corridors are identified on Figure 7: High Visibility Corridors.

7.1 LANDSCAPING

7.1.1 Corridor Landscaping

To ensure a unified roadway image, sites adjacent to a High Visibility Corridor must include a minimum 3.0 meter-wide landscaped area for the entire length of the site's frontage with a minimum of one large tree per 12 meters of lineal frontage. Where large tree planting is not preferred or possible, such as under hydro lines, equivalent landscaping may be considered including the clustering of feature landscaped areas or planting one small tree per eight lineal meters of frontage.

7.1.2 Landscape Plans

In accordance with the Urban and Landscape Design Standards Manual, landscaping is required for properties zoned Industrial Restricted and Industrial General in the FS-A areas. To promote landscaping that compliments the industrial nature of the area while enhancing its visual appeal, landscape plans for developments within an FS-A designation will be encouraged to:

i. Retain, incorporate and enhance existing natural features, such as wetlands, trees and natural drainage courses as much as possible;
ii. Scale landscaping in line with the size of the development (i.e. large industrial buildings should have more significant landscaping/plantings); and,
iii. Emphasize tree planting over shrub plantings, in keeping with the City's Urban Forestry Management Plan and to minimize landscape maintenance.

7.2 PARKING

7.2.1 Parking Lot Design

To optimize the utility of space dedicated for parking, parking lot design for developments in FS-A designations or adjacent to *High Visibility Corridors* should consider additional functions such as stormwater management, snow storage and pedestrian and vehicle circulation.

7.2.2 Parking Lot Standards

In accordance with the City of Brandon Zoning By-Law, approaches, drive aisles, parking areas and loading areas for parcels zoned Industrial Restricted (IR) in the FS-A designated areas shall be hard surfaced. For all other zoned properties in the FS-A designated areas, hard surfacing will be encouraged, in particular developments adjacent to *High Visibility Corridors*.

7.2.3 Shared Facilities

To minimize the amount of paved area, achieve higher parking efficiencies, and maximize land availability for development and landscaping, the shared use of loading areas, parking, driveways and laneways between adjacent parcels is encouraged in all land use designations.

7.3 SITE & BUILDING DESIGN

7.3.1 Façade Treatment

Building articulation, in terms of a variety of materials, roof lines and architectural features, is encouraged for facades facing *High Visibility Corridors* and for those facing a street on lands with a FS-A designation.

7.3.2 Industry Clusters

To promote synergistic business relationships within the EBIA, the City will support and encourage the clustering of complementary businesses to:

i. Minimize travel distances of inputs and outputs between businesses;
ii. Reduce waste through the recycling of industrial by-products (such as steam, heat, water, and other outputs); and
iii. Maximize development efficiencies through the shared use of resources and facilities.

7.4 SIGNAGE

7.4.1 Entryway Signage

Developers of industrial subdivisions in an FS-A designation are encouraged to provide entryway signage with complimentary landscaping at key access points in order to identify and market the development. Entryway signage shall be located on private property where it will not disrupt intersection sight lines.

8.0 IMPLEMENTATION

The EBIA is the predominant area in the city for businesses that generate net growth in the economy and spinoff growth for both the city and region. To grow the EBIA and drive new development, the City shall proactively undertake actions and foster partnerships to remove hurdles to develop the EBIA lands. The implementation policies provide direction on

8.1 ACTIONS & PHASING

8.1.1 Implementation Actions

The City shall proactively work in collaboration with private a public sector partners to complete the implementation actions in Schedule E. The implementation actions in Schedule E shall be reviewed and updated yearly to ensure they are relevant to implement the EBIA Secondary Plan.

8.1.2 Phasing

The City shall include the phasing of transportation and servicing improvements for the EBIA in Schedule F in the City's 30 year capital budget for growth and endeavor to service the full service growth nodes in the following timeframes:

i. The Victoria Node in the short term (0-2 years)
ii. The Richmond Ave Node in the medium term (10-20 years); and
iii. The PTH 110 & Richmond East Nodes in the long term (20-30 years).

The phasing of infrastructure is market driven and the City shall consult with property owners and prepare a business case prior to front-ending any capital infrastructure improvements to service the growth nodes in the EBIA.

8.2 COST OF DEVELOPMENT

8.2.1 On-Site Improvements

Developers shall be responsible for constructing all on-site improvements, including but not limited to roadways, open space, storm water conveyance and retention ponds, water and wastewater lines, and lighting.

8.2.2 Off-Site Improvements

In the absence of development charges, off-site developer contributions shall be determined by development agreements executed when a site is rezoned or subdivided for development.

8.2.3 Land Dedication

At the time of subdivision, a developer shall dedicate, without compensation, the following lands:

i. Collector and local street right-of-ways;
ii. Storm water management facilities and other lands not suitable for development; and
iii. Open space as public reserve.

8.2.4 Oversizing

Developers may be required to oversize transportation or servicing improvements required to support full buildout of a growth node or a development sub-area. In the absence of Council-approved Development Agreement Parameters; where developers construct oversized infrastructure as the City shall endeavor to recover, on behalf of the developer, the additional costs incurred from developers benefiting from the infrastructure.

8.3 LAND USE APPROVALS

8.3.1 Concept Plans

The EBIA Secondary Plan identifies "Development Sub-Areas" on Figure 3 where more detailed planning is needed prior to subdividing and/or rezoning for development. Concept plans should be submitted concurrently with any rezoning and/or subdivision application for a "Development Sub-Area" in order to achieve coordinated development.

Property owners in a "Development Sub-Areas" are encouraged to work together with the City to prepare a concept plan for their area. When working together is not possible, a single owner may prepare a concept plan with a "shadow plan" for the portions of the area they do not own. The shadow plan may contain more general information as determined by the Chief Planner and the City Engineer.

Concept Plans should be adopted through a resolution of City Council in conjunction with a rezoning and/or subdivision application.

8.3.2 Concept Plan Submission Requirements

The information provided in a concept plan will vary between the "Development Sub-Areas" as determined by the Chief Planner and City Engineer and may include:

i. A phase 1 environmental site assessment
ii. Grounds and surface water evaluation
iii. Preliminary geotechnical infestation
iv. Information detailing how the concept plan implements the EBIA Secondary Plan
v. Layout of future roadways, pedestrian connections, and transit routes/stops
vi. Layout of building lots, with proposed zones and land sizes
vii. Design of servicing networks, including water, wastewater and land drainage
viii. Traffic impact assessment, if traffic exceeds projected volumes in Secondary Plan

ix. An off-site servicing assessment, if projected servicing requirements exceed volumes in Secondary Plan
x. Phasing of development

8.3.3 Subdivision & Rezoning

Subdivision and/or rezoning of lands within the EBIA Secondary Plan shall conform to the Secondary Plan, an approved concept plan (if applicable), the Zoning By-law and any other City By-law regulating development. Where a concept plan is adopted, the subdivision and development of the lands shall follow the approved phasing plan.