

PROJECT DESCRIPTION
UNDER THE *CANADIAN ENVIRONMENTAL ASSESSMENT ACT*

**CANADIAN PACIFIC RAILWAY COMPANY (“CP”)
LES CÈDRES INTERMODAL COMPLEX**

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DEFINITIONS AND INDUSTRY TERMS

In this Project Description:

“**Container**” means an intermodal cargo container that can be transported by and between multiple modes of transportation. They can be stacked together on ships, loaded onto railcars (single or double stacked) and loaded onto truck trailers. Containers come in a variety of sizes including 20, 28, 40, 48 and 53 feet.

“**Distribution centre**” means a warehouse and distribution facility served by truck, where value-added services (including supply chain management) are provided for the distribution of freight (merchandise) received in containers. Distribution centres typically provide space for the warehousing and temporary storage of merchandise as well as crossdock facilities to sort freight by deconsolidating the merchandise received in containers and reassembling the merchandise into truckloads destined to various industries and retail businesses. Merchandise can also be received by truck at a distribution centre, sorted and loaded into containers for shipment by rail.

“**Intermodal**” means the transportation of freight in a container, using more than one mode of transportation (ship, rail and/or truck), without any handling of the freight content itself when changing modes.

“**Intermodal facility**” means a rail served container transfer yard to transfer containers between **rail and truck** modes, and generally includes a rail yard to build and process intermodal trains and container storage areas. In order to meet modern standards of efficiency and security, newer intermodal facilities integrate truck, warehouse and distribution facilities for the processing, pick-up and delivery of containers and their contents.

“**Les Cèdres Intermodal Complex**” or “**Intermodal Complex**” means CP’s proposed intermodal facility to be constructed in the town of Les Cèdres, in the Regional County Municipality of Vaudreuil-Soulanges. It will include all necessary infrastructure as described herein, including a rail served container transfer yard and container storage areas, as well as truck, warehouse and distribution facilities for the processing, pick-up and delivery of containers and their contents.

“**TEU**” means a twenty (20) foot equivalent unit container, the maritime standard used when counting cargo units of varying lengths. One TEU is equal to an International Standards Organization (ISO) container measuring 8 x 8.5 x 20 feet. A forty (40) foot ISO container would equate to two TEUs.

“**Top Lifter**” means a mobile piece of equipment that loads and unloads containers to and from railcars and trucks.

1.0 GENERAL INFORMATION

1.1 General

Rail Transportation

As one of the most trade-reliant countries in the world, Canada's prosperity fundamentally depends on international commerce. The federal government has summarized the challenge as follows: "To maintain our standard of living, Canada must meet the challenge of rapidly changing dynamics of global trade. These dynamics are driven by the rapid, seamless and secure movement of goods and people around the world in global transport and supply chains."¹

The federal government has established a number of initiatives to ensure that Canada's transportation infrastructure is able to meet demands of global trade, including the Asia-Pacific Gateway and Corridor Initiative. More recently, the federal government signed a memorandum of understanding ("MOU") to develop the Ontario-Quebec Continental Gateway and Trade Corridor in partnership with the private and public sectors. The main objective of the MOU is to establish the Ontario-Quebec commercial gateway and trade corridor as a strategic, integrated and competitive transportation system to better support international trade and the timely movement of goods. The federal initiatives highlight the importance of investing in transportation infrastructure to ensure that Canada is able to respond to new and changing trade patterns for the benefit of Canadian businesses and the Canadian population.

Businesses across Canada increasingly rely upon inter-provincial and international trade, including the importation of goods, parts and products as part of their supply chains. These "global" supply chains require goods to be transported over large distances via multiple modes (marine, rail and truck). Rail transportation is one important part of the supply of goods throughout Canada, from coast to coast, and necessary to efficiently transport large volumes of traffic from the port gateways through an extensive rail network to destinations across Canada and the United States.

The need for global supply chains to achieve rapid, seamless and secure movement of goods has led to a surge in container traffic, as the containers are designed to be secure, and easily transferred between marine, rail and truck modes. Many countries are strategically directing their expansion efforts and investment dollars into container terminal projects and, as a result, the movement of goods through containers will continue to increase. This in turn leads to a requirement for distribution centres, providing value-added services and supply chain management, to be located where containers are transferred between transportation modes.

The significant growth of container traffic presents two distinct challenges for the rail transportation network:

¹ Government of Canada, "Canada's Asia-Pacific Gateway and Corridor Initiative", 2006 (www.tc.gc.ca/MajorIssues/APGCI)

- a) sufficient **infrastructure capacity** to handle the surging volumes of container traffic; and
- b) **integration of the transportation modes** (including distribution centres) for the efficient and seamless movement of goods.

a) Infrastructure Capacity

CP's rail network faces the challenge of having sufficient infrastructure capacity to meet the rapid growth of inter-provincial and international trade and, in particular, the surging volumes of containers. The Port of Vancouver reported that, in 2006 alone, container volumes increased by 25%.² Container volumes will continue to increase as the range of products shipped in containers continues to grow. Inbound containers include products ranging from consumer products, electronics, clothing and furniture to industrial parts, auto parts, industrial products and processed foods. Outbound container products range from wood pulp and **lumber** products to **agricultural products/specialty crops** (peas, beans, lentils, soya beans, alfalfa). The ability of businesses to access multiple modes of transportation through the use of containers provides opportunities to expand Canada's trade and access huge markets for Canadian lumber, agricultural and other products.

The development of state-of-the-art infrastructure in the Montréal region, namely the Les Cèdres Intermodal Complex, is key to ensuring sufficient capacity to meet the increasing demands by business and consumers for products generated by inter-provincial and international trade. This includes sufficient capacity to:

- handle the increasing number of intermodal trains;
- handle longer trains;
- load and unload the increasing volume of containers;
- stage and store loaded and empty railcars;
- store containers; and
- integrate distribution centres.

b) Efficient Integration

Infrastructure expansion alone (i.e., increasing the size of the facility) is not sufficient to meet the challenge of facilitating global supply chains and the requirement for the “**rapid, seamless and secure movement of goods**”. **The efficient integration of rail and truck transportation modes is also critical in meeting the opportunities and challenges of international trade.** The federal government has stated:

² Vancouver Port Authority, “Statistics Overview 2006”, p.6 (www.portvancouver.com).

“Today **goods seldom move via a single mode of transportation.** Achieving productivity gains through **increased integration in the transportation system** as it relates to global supply chains is a major driver for a gateway approach.”³

In order to achieve productivity gains and ensure the adequate supply of goods to the population, intermodal facilities must be strategically located and carefully designed in accordance with modern standards for efficiency and security of railway operations and in such a way that rail and truck operations are integrated with warehousing and distribution facilities. This requires:

- close proximity to the main railway network;
- trackage infrastructure designed for fluid train movements;
- trackage unimpeded by at-grade crossings;
- the integration of distribution centres for warehousing, storing, loading, sorting and consolidating freight and/or merchandise;
- close proximity to highway corridors;
- efficient and uncongested road access to and from the facility; and
- efficient road network within the facility for fluid truck movements.

Greater Montréal Area

CP owns and operates intermodal facilities at key locations across its rail network. (See Map in **Appendix 1.**) CP’s current intermodal facility serving the Montréal region is located on the island of Montréal in the borough of Lachine (“**Lachine Intermodal Facility**”). It is the **second busiest CP intermodal facility** (the busiest is CP’s Vaughan Intermodal Facility located north of Toronto) and holds a key position at the end of CP’s transcontinental rail corridor linking Montréal to Vancouver. Because the Lachine Intermodal Facility is the eastern-most intermodal facility on CP’s network, it serves not only the Greater Montréal region, but also the eastern Ontario and Maritimes markets. CP’s rail network also connects directly with destinations in the north-eastern United States, providing additional access to markets in highly populated areas.

The Lachine Intermodal Facility predominantly receives international container traffic via unit trains destined to the **Greater Montréal region as well as the eastern Ontario and Maritimes markets.** The Lachine Intermodal Facility also serves Canadian domestic markets by providing inter-provincial rail transportation for container traffic.

CP’s intermodal infrastructure in Lachine is facing numerous demands:

- CP projects that its intermodal traffic in the Greater Montréal region will increase by 7%-10% annually over the next several years.
- Its proximity to Ontario, the Maritimes and the populous northeast U.S. markets is a determining factor in Montréal’s role as a **strategic transportation hub** in the

³ See “Canada’s Asia-Pacific Gateway and Corridor Initiative”, p.5.

Canadian economy. The future expansion of CP's intermodal capacity will further enhance Montréal's status as an important continental hub.

- The integration of a distribution centre is not possible at the Lachine Intermodal Facility as:
 - a) there is no space within the current footprint to allow for construction of new distribution facilities;
 - b) there is no adjacent land available for CP to expand and offer integration.
- Intermodal traffic will continue to grow as more commodities are shipped in containers, as it allows shippers to efficiently use multi-modal transportation and meet consumers' growing demand for the timely delivery of retail merchandise.

Limitations of Lachine Intermodal Facility

The Lachine Intermodal Facility was developed in the 1960s on a relatively small 36 hectare site. As a result, it is facing numerous capacity and operational constraints:

- It is operating at approximately 96% of its designed capacity. The facility is designed to handle approximately 240,000 containers per year and CP estimates that it will handle 239,800 containers in 2008.
- CP cannot expand its current footprint to handle the container volumes forecast for the coming years. The facility is located in a well-developed industrial area of Greater Montréal with **no surrounding land available** to enlarge the current footprint in Lachine.
- The current 36 hectare site was designed for trains much shorter than today's trains, and at a time when intermodal unit trains did not exist in Canada. The shorter tracks result in inefficient rail operations because CP crews must repeatedly switch and reposition intermodal cars. The limited size of the facility also limits the available container storage space and results in the dense stacking of containers. The dense container stacks require CP to move containers repeatedly to access specific containers for transfer between modes.
- The facility does not have a large enough footprint to allow for the re-design of the trackage and incorporation of a modern loop-track configuration that would efficiently serve the entire facility and permit the efficient handling of 10,000 foot unit trains, common in today's high capacity intermodal facilities.
- As previously stated, the current footprint cannot accommodate the integration of distribution centres (including affiliated trucking services) to increase the efficient transfer of goods between rail and truck modes. The value-added services provided by distribution centres are now an integral part of advanced transportation logistics and critical to the management of global supply chains. The integration of these value-added functions onto one site would ensure the fluidity and timely rail-truck transfer of large quantities of merchandise arriving in containers and destined by truck to large retailers to serve the Greater Montréal region as well as eastern Ontario and Maritime consumers.
- The Lachine Intermodal Facility is surrounded by a network of local streets which cannot be re-designed to accommodate the truck traffic necessary to serve the facility.

(See **Appendix 2** for maps showing location of the current Lachine Intermodal Facility.)

To resolve the demands and constraints described above, CP proposes to replace the Lachine Intermodal Facility by constructing a new state-of-the-art intermodal facility (“**Les Cèdres Intermodal Complex**”) to serve the markets of Greater Montréal, eastern Ontario and the Maritimes. Les Cèdres Intermodal Complex will contribute to Eastern Canada’s productivity by ensuring fast, reliable and cost-effective delivery of imported consumer goods, parts and products as well as ensuring the efficient domestic movement of containers to and from the Province of Québec. It will specifically enhance international and inter-provincial trade by:

- Creating additional capacity for the foreseeable future in the Greater Montréal area, eastern Ontario, and the Maritimes to meet current and projected demands of international and inter-provincial trade; and
- Increasing the efficiency of global supply chains through the efficient transfer of containers between rail and truck modes.

1.1.1 The Nature of the Project

Proposed Location – Les Cèdres, Québec

After an extensive search, **the only site** meeting the requirements of a modern intermodal facility was the site of the former Canadian Army ammunition plant built in Les Cèdres, Québec during the Second World War and later used for railway maintenance and warehousing activities by Soulanges Industries. CP acquired this initial site in 2006 and later on secured options on adjacent properties necessary to assemble the total acreage needed to build its new Intermodal Complex. This strategic location is some 35 kilometres south-west of Montréal in the Municipality of Les Cèdres, in the Regional Municipality of Vaudreuil-Soulanges. (See map in **Appendix 3**.) The site is adjacent to Mile 25.0 of CP’s Winchester Subdivision, a part of CP’s mainline network connecting Montréal to the **Ports of Vancouver, New York and Philadelphia**. (See **Appendix 4** for a map of CP’s rail network and interline connections in North America.)

The proposed site is also at the heart of an **important regional road network** – with Highways 40 and 20, traversing the north and south side of the island of Montréal respectively and the future Highway 30 – a ring road designed to bypass the island of Montréal’s road network via the south to access the Maritimes and the north-east U.S. markets. As a result, the proposed Les Cèdres Intermodal Complex will **maximize the integration of rail and highway networks in the Greater Montréal region**.

The Project will cover a total of 313 hectares. The core of the proposed site is a 172 hectare parcel of land purchased by CP in 2006 from Soulanges Industries. It has a long history of industrial use, **including use as a railcar storage facility**. As a result, 55% of lands required by CP are already devoted to a similar industrial use. The remaining lands are provincially zoned as agricultural lands and have been developed for the cultivation of crops and a commercial tree nursery.

Brief Overview of Les Cèdres Intermodal Complex

The proposed site has sufficient space to build a state-of-the-art intermodal facility capable of accommodating today's long unit trains (i.e., up to 10,000 feet) required for the efficient movement of goods. The proposed intermodal facility will be designed with the capacity to handle up to 550,000 containers per year, an increase in capacity of over 100% from the current Lachine Intermodal Facility. As integral components of a state-of-the-art intermodal facility, Les Cèdres Intermodal Complex **will include distribution centres** essential to ensure the rapid, seamless and secure movement of goods through the transportation supply chain.

In particular, Consolidated Fastfrate Inc. ("**Fastfrate**"), a global asset based logistics provider and an integral part of CP's intermodal services across Canada, will operate its distribution centre within Les Cèdres Intermodal Complex. Fastfrate provides an extensive range of value-added services including supply chain logistics management, deconsolidation of merchandise received in containers and re-assembly to meet shippers' specifications, short and long term warehouse storage and state-of-the-art warehouse security. Fastfrate fully supports the Project and has provided CP with a letter in support which is attached in **Appendix 8**.

In order to meet the needs of the Greater Montréal region, the new Les Cèdres Intermodal Complex will require the following components:

- Trackage configured with long working tracks in a loop design to maximize efficient railway operations;
- Buildings with a variety of functions including office and maintenance buildings and distribution centres;
- Roadways, parking lots and truck staging areas to facilitate efficient truck operations;
- Container storage areas to consolidate the handling of containers on one integrated site; and
- Utilities and other functional elements.

It is anticipated that the new Les Cèdres Intermodal Complex will be open for operation in 2013.

1.1.2 Name and Proposed Location

The official project name is "**Les Cèdres Intermodal Complex**" (the "**Project**").

The Project is located 35 kilometres south-west of Montréal, in the Municipality of Les Cèdres, in the Province of Québec. (Refer to map in **Appendix 3**.)

1.1.3 Project Description Distribution List

The Responsible Authority for the administration of the *Canadian Environmental Assessment Act* will be the Canadian Transportation Agency. As a result, the Project Description will be distributed to the Canadian Transportation Agency, Ottawa.

1.1.4 Consultations

Overview of CP's Consultation Program

CP has developed and undertaken an extensive consultation program with various Project stakeholders. CP's planning and consultation approach for the Project is in compliance with CP's social responsibility policies. The primary goal has been to work closely with the Municipality of Les Cèdres and collaborate together in a community consultation and communication process with local residents, farmers and other stakeholders. Realizing the importance of maintaining a constructive dialogue with these stakeholders, CP developed a set of ongoing commitments related to the Project to ensure a transparent process, as summarized in the table below:

| Dimension | CP's Commitments |
|------------------------------------|--|
| Community | <ul style="list-style-type: none">• Maintain ongoing communication and collaboration with the residents of Les Cèdres, as well as with local and regional authorities• Remain attentive to the concerns expressed by residents; respond to these concerns and develop appropriate solutions |
| Quality of life | <ul style="list-style-type: none">• Conduct the necessary studies to measure potential impacts on residents' quality of life and propose solutions• Isolate Les Cèdres Intermodal Complex and its entry/exit points from the surrounding area• Ensure adequate planning of construction-related work on the Project's site so as to minimize any impact on the day-to-day lives of local residents |
| Agriculture and farming operations | <ul style="list-style-type: none">• Configure the Intermodal Complex so as to minimize impacts on farming operations;• Ensure that local traffic (including farm machinery) is unimpeded (i.e., build an overpass on Montée Chénier)• Ensure appropriate drainage of the Intermodal Complex site |
| Environment | <ul style="list-style-type: none">• Conduct the necessary studies to measure potential impacts on the environment and propose solutions |
| Traffic | <ul style="list-style-type: none">• Cooperate with the municipality and the Ministère des Transports ("MTQ") to design a safe, dedicated access road between the Project and Highway 20• Direct truck traffic from the Project and Les Cèdres Intermodal Complex away from Chemin Saint-Dominique |

| Dimension | CP's Commitments |
|---|---|
| Infrastructure | and Chemin Saint-Féréol <ul style="list-style-type: none"> • Ensure the Intermodal Complex does not burden municipal infrastructure or resources (i.e., water, waste water, storm water) • Avoid financial burden to municipality by absorbing infrastructure related costs |
| Economic, taxation and employment impacts | <ul style="list-style-type: none"> • Cooperate with local and regional authorities to maximize economic spin-offs for the region's population and businesses |

The Project's land assembly (described with further details in Section 1.3.2) was based on the above commitments, as well as the needs expressed by farmers with adjoining properties whom CP met individually in February and March, 2006.

Participants at the meetings emphasized the importance of not impacting certain agricultural businesses, notably dairy farms which required a minimum area for manure spreading. These considerations guided the discussions that took place on the purchase of various parcels of land. The land acquisition discussions were also guided by CP's intent to proceed by mutual agreement and a comprehensive compensation program designed with the assistance of a third party expert. The compensation program provided a transparent process to approach local landowners and included a variety of key features, such as:

- determining the market value of the land;
- any specific conditions that might increase its value, such as the presence of buildings or a particular form of agriculture;
- the possibility of arranging land swaps with farmers who wish to maintain or increase their overall holdings; and
- compensation for tenant farmers.

Beginning in 2006, CP representatives met individually with property owners who had expressed an interest in transferring parcels of land under the terms and conditions of the program. Land purchases or swaps necessitated numerous discussions between owners of adjoining property and CP representatives. In the fall of 2006, the optimal site configuration took shape when owners of adjoining properties granted CP options to purchase (“Options”) for nearly 70% of the required Project area. Since then, CP has acquired Options for over 95% of the Project area. CP continues to consult with local landowners and residents regarding the Project.

1.1.4.1 Provincial

CP initially presented the Project to the Government of Québec in September, 2005 in a meeting to inform senior officials from the relevant departments, including the Executive

Council, Transport, Economic Development, Municipal Affairs, Agriculture and Environment Ministries, as well as the Member of the National Assembly for Vaudreuil-Soulanges. It was then decided that the Ministère des Affaires municipales et des régions (“MAMR”) would act as the key contact and would coordinate the necessary actions within the government to provide CP with support in moving forward with the planning of the Project as well as the regional and municipal zoning changes required. Since that time, CP has reported regularly to its MAMR contact on the Project’s progress.

In January 2006, CP initiated discussions regarding road access with the Montérégie Regional Office of **MTQ**. Several meetings were held with the MTQ and the Municipality of Les Cèdres to review various scenarios with a view to selecting one that would meet the MTQ’s technical and safety standards while minimizing impacts on local municipal roads, local traffic and agricultural lands. (See Section 2.1 III. a) Main Access Road for details.)

MAMR was also key in coordinating the government’s opinion on the changes to the regional land use plan that were proposed by the Regional County Municipality (“RCM”) of Vaudreuil-Soulanges to expand the non-agricultural land use to the entire footprint of the proposed Les Cèdres Intermodal Complex. The Minister stated that the changes proposed by the RCM were in compliance with the government’s policies and orientations in a letter dated October 30, 2007. (A copy of the letter is attached in **Appendix 5**.) The RCM of Vaudreuil-Soulanges approved the final zoning modifications on January 23, 2008.

CP remains in regular contact with the Member of the National Assembly for Vaudreuil-Soulanges, Mme. Lucie Charlebois, regarding the progress of the Project and issues of interest.

1.1.4.2 Municipal

The Municipality of Les Cèdres was the first organization to receive a complete briefing on the proposed Les Cèdres Intermodal Complex. This briefing took place in December, 2005 with the Mayor and the City General Manager and it was followed shortly thereafter by a presentation to the Municipal council. Since that time, CP has worked closely with the Municipality on all aspects of the Project to ensure its harmonious integration into the local landscape.

CP entered into an agreement with the Municipality of Les Cèdres in July, 2006 to provide it with financial assistance to undertake various studies on topics related to the proposed Project. In addition, CP is currently discussing the terms of an overall protocol agreement with the Municipality on items such as land subdivision, park fees, etc.

A letter in support of the Project from the Municipality of Les Cèdres is attached at **Appendix 8**.

1.1.4.3 Other Agencies and Organizations

CP has consulted with the Montréal Metropolitan Commission (“**MMC**”), the organization responsible for land use planning in the overall metropolitan area. The MMC supports the Project and adopted a modification to the regional plan to incorporate the Project into the territory. The modification was approved in a resolution adopted on October 4, 2007, a copy of which is attached in **Appendix 5**.

CP undertook discussion with the Union des Producteurs Agricoles (“**UPA**”) of Québec in January, 2006 to explain the Project and the reasons for the acquisition of agricultural land. The UPA provided sound advice on how to proceed to minimize disruption of farm operations and this was reflected in the final configuration of the site. CP has provided periodic updates to the UPA and remains available for further discussion. The UPA is represented on the RCM Agricultural Advisory Committee, as well as the Agricultural Advisory Committee of the MMC. It will also be involved as a stakeholder in the CPTAQ process (see Section 1.4.2).

CP has also consulted with the Vaudreuil-Soulanges Local Development Centre (“**CLD**”), which has provided a letter in support of the Project (a copy is attached in **Appendix 8**). The Vaudreuil-Soulanges CLD is a non-profit organization responsible for promoting industrial, commercial, social, agricultural and tourism development in the RCM of Vaudreuil-Soulanges and its 23 municipalities. The letter indicates that since the inception of the Project, the CLD has followed and supported Les Cèdres Intermodal Complex Project, which aligns with its principal development efforts and its transportation and logistics strategy. The CLD also believes that Les Cèdres Intermodal Complex will serve as an important lever for economic development.

1.1.4.4 Public Consultations

As stated above, CP has developed and undertaken an extensive consultation program, including consultation with adjacent landowners and the members of the local community. Details of all external communications since the public announcement of the Project are attached as **Appendix 6**.

To ensure that communication regarding the progress of the Project continues on an on-going basis with the community of Les Cèdres and the region, the following public consultation tools have been implemented by CP:

- A bilingual newsletter was launched in November 2006. To date, two issues of the newsletter have been distributed.
- An **information office** was opened in May, 2007 situated at 1000 Chemin du Fleuve in the Municipality of Les Cèdres. CP representatives meet regularly with visitors in the community who can consult various Project-related documents on the office premises. The office is open regularly each week and guests can also call CP to arrange for an appointment. A 3-D computer generated model, which can be

viewed at the information office, assists CP representatives in explaining the activities related to the Project. (See DVD attached as **Appendix 7**.)

- A bilingual website at www.cplescedres.ca (French: www.cplescedres.ca/fr/ and English: www.cplescedres.ca/en/) was created in June 2007 to announce events, and provide FAQs, general information and an e-mail address for users to send other questions and/or comments.

In addition to the consultations with the members of the local community described above, there will be numerous opportunities for the public to provide input and comments during the environmental screening process under the *Canadian Environmental Assessment Act*:

- Information about the Project and relevant documentation will be publicly available on the Canadian Environmental Assessment Registry's website. CP will provide a link to the Registry website on CP's bilingual website noted above.
- Midway through the environmental screening process, and prior to filing the environmental assessment, CP will hold at least one public open house to solicit public input and comments.
- A copy of the environmental assessment will be made publicly available at one or more local libraries, municipal offices and CP's Project information office in Les Cèdres.
- A 30-day public comment period will be advertised in local newspapers to solicit public comments on the environmental assessment.

Following the environmental screening process, CP is required to submit an application for approval to construct the Project to the Canadian Transportation Agency (pursuant to Section 98 of the *Canada Transportation Act*). Members of the public will have an opportunity to provide input and comments regarding CP's construction application during a 30-day public comment period that CP will advertise in local newspapers. A copy of the construction application will be made publicly available at one or more local libraries, municipal offices and CP's Project information office in Les Cèdres.

1.1.4.5 Other Consultations

a) Shippers and Truck Carriers

CP has also conducted many consultations with shippers and truck carriers who have expressed their support for the Project, including the proposed location. They have indicated that:

- Growth in container traffic is forecast to continue and Les Cèdres Intermodal Complex will support continued growth.
- The close proximity to the CP mainline and the regional network of highways will provide a more efficient location to interchange container traffic.

b) Canadian National Railway (“CN”)

Since November, 2006, CP has engaged in discussions with CN regarding the Project and, in particular, the grade separation required under Mile 30.21 of CN’s Kingston Subdivision. On October 31, 2007 CN tabled a preliminary conceptual design to CP for the grade separation and CP continues to work with CN’s Manager, Public Works regarding the grade separation.

1.1.5 Other Environmental Assessment Processes

1.1.5.1 Provincial Environmental Processes

CP has met and communicated with the Ministère du Développement durable, de l’Environnement et des Parcs. CP has identified certain provincial permits that it will apply for in relation to the Project and will continue to work with the ministry as the Project develops.

1.1.5.2 First Nations Land Claims Processes

There are no First Nations reserves in the immediate region of the Project site. The closest First Nations territories are:

- 1) The Kahnawake Mohawk Territory/Reserve is located on the south shore of the St. Lawrence River approximately 40 kilometres east of the Project site. The reserve is approximately 48 square kilometres in area and has a resident population of approximately 7,100. A significant number of Kahnawake members live off the reserve territory.
- 2) The Kahnésatake Mohawk Territory/Reserve is located on the north shore of the Outaouais River approximately 20 kilometres north-west of the Project site. This territory covers an area of approximately 11 square kilometres and has a registered population of approximately 2,000.

The federal department of Indian and Northern Affairs Canada (“INAC”) has been consulted to document any native land claim issues for the area. A response from INAC is outstanding and will determine the nature of consultations.

1.2 Contacts

1.2.1 Proponent’s Name

The proponent’s name is Canadian Pacific Railway Company.

1.2.2 Co-Proponents

There are no co-proponents for this Project.

1.2.3 CP Contact Person (for Canadian Transportation Agency)

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1.3 Federal Involvement

1.3.1 Federal Financial Support

To date, CP has not applied for any federal financial support for the Project. CP intends to fund the Project with its own funds.

1.3.2 Land Ownership

No federal lands, provincial lands or First Nations lands are required for the Project.

All lands required for the Project are privately owned lands. CP studied numerous potential locations and the current site was chosen because of its strategic proximity to rail and highway networks and because over one-half of the site was already devoted to industrial use. Of the 313 hectares required for the Project, 172 hectares have a long history of industrial use, including its most recent use as a railcar storage site. This 172 hectare parcel of land (the former Soulanges Industries site) is recognized as **industrial/non-agricultural land in the region**.

Another 127 hectares have been assembled under Options in a manner to ensure the least impact on agricultural activities. These lands:

- provide minimal encroachment on agriculturally zoned lands;
- optimize the site configuration in order to accommodate intermodal operations;
- provide direct access to Highway 20; and
- meet the commitments identified in the consultation program to protect the viability of farms that could be affected by the Project.

CP is presently in negotiations for the remaining lands required (approximately 4%). The land consultation and acquisition approach in the community is discussed in section 1.1.4.

Of the 313 hectares required for the Project, CP has secured approximately 297 hectares. The following table provides details of lands purchased or under Option by CP:

| <u>Lot(s) or parts of Lot(s)</u> | <u>Surface area covered by the request (m²)</u> |
|---|--|
| Properties acquired by CPR in 2006 for the Project – Soulanges Industries | |
| 2 048 406 | 1,721,003.0 |
| 2 047 781 | |
| 2 048 391 | |
| <u>Subtotal</u> | <u>1,721,003.0 (55.0%)</u> |
| Properties in the process of being acquired to build the Project | |
| 2 048 398 | 43,236.9 |
| 2 047 334 | 51,584.2 |
| 2 047 333 | 57,421.5 |
| 2 047 332 | 59,139.7 |
| 2 047 768 | 63,368.2 |
| 2 047 617 | 71,049.4 |
| 2 380 256 | 110,765.4 |
| 2 048 399 | 102,902.5 |
| 2 047 565 | 103,088.7 |
| 2 047 566 | 101,513.0 |
| 2 048 400 | 95,346.2 |
| 3 353 560 | 109,907.4 |
| 2 047 567 | 60,642.8 |
| 2 047 571 | 70,507.7 |
| 2 048 402 | 71,770.2 |
| 3 051 718 | 38,028.2 |
| 2 047 767 | 41,243.8 |
| 2 047 576 | 11,616.0 |
| 2 048 405 | 2,184.9 |
| 2 047 749 | 876.6 |
| 2 047 748 | 2.7 |
| 2 048 408 | 570.5 |
| 2 047 271 | 735.2 |
| 2 048 392 | 3,309.1 |
| <u>Subtotal</u> | <u>1,270,810.8 (40.6%)</u> |
| Properties in the process of being acquired to build the private road access | |
| 2 048 442 | 12,342.8 |
| 2 048 443 | 14,447.4 |
| 2 801 335 | 100,575.3 |
| <u>Subtotal</u> | <u>127,365.5 (4.1%)</u> |

| <u>Lot(s) or parts of Lot(s)</u> | <u>Surface area covered by the request (m²)</u> |
|---|--|
| Properties in the process of being acquired for building an overpass on Montée Chénier | |
| 2 047 749 | 4,486.3 |
| 2 047 578 | 2,738.1 |
| 2 048 392 | 1,494.2 |
| Subtotal | 8,718.6 (0.3%) |
| Total Project | 3,127,897.9 (100.0%) |

The location of the lands and the lot reference numbers are shown on the Overview Project Plan attached as the first map in **Appendix 10**.

The lands under Option are primarily agricultural lands and under the protection of Québec’s *Agricultural Lands Protection Act* (“ALP Act”). CP will apply under the ALP Act for the subdivision and acquisition of the lands and their use for non-agricultural purposes.

1.4 Authorizations/Applications

1.4.1 Federal Permits and Authorization

An application for the construction of the railway infrastructure will be submitted by CP to the Canadian Transportation Agency pursuant to Section 98 of the *Canada Transportation Act*. An application under Section 98 triggers the requirement for a federal environmental assessment process under the *Canadian Environmental Assessment Act*.

In addition, the construction of an underpass structure under CN’s Kingston Subdivision at Mile 30.21 will require the issuance of a Notice of Railway Work (pursuant to the *Railway Safety Act*) to the affected parties. CP is currently consulting with CN regarding the grade separation and will enter into an agreement with CN for the grade separated road crossing.

CP anticipates that federal authorizations will be required under the *Fisheries Act*, prior to construction. (See Section 4.1.2 for further information.)

1.4.2 Provincial and Municipal Permits

In addition to meeting all federal requirements, CP is cooperating with provincial and municipal levels of government in Québec, including the provincial transportation department, the Regional County Municipality, and the Municipality of Les Cèdres, in order to ensure that the Project is appropriately integrated into the municipality of Les Cèdres. As most of the cultivated agricultural land is protected under the ALP Act, in order to subdivide and acquire the parcels CP will apply to the Commission de protection du territoire agricole du Québec (“CPTAQ”), the provincial agricultural land

preservation commission, to authorize non-agricultural uses on the lands. Further details regarding the process are summarized in **Appendix 9**.

If applicable, CP will apply for further permits and authorizations depending upon the Project's final design.

2.0 PROJECT INFORMATION

2.1 Project Components/Structures

Three main principles have guided the conceptual development of the Project components and structures:

- a) Physical and functional integration of rail and truck operations that will increase the efficiency of both modes of transportation;
- b) Minimize impact of the Project on local infrastructure and services; and
- c) Dedicated road access to the site to minimize the impact of trucks and vehicle traffic on the surrounding area.

As a result, the Les Cèdres Intermodal Complex has been designed to include the following main structural components:

- I. Trackage infrastructure designed for fluid rail operations;
- II. Buildings, including an administration building, a maintenance building and two distribution centres to support the integrated Les Cèdres Intermodal Complex operations;
- III. Roadways, parking lots and storage areas to facilitate efficient and dedicated truck access, the efficient movement of containers between modes and to support operations in Les Cèdres Intermodal Complex; and
- IV. Utilities and related service infrastructure to serve Les Cèdres Intermodal Complex, while minimizing demands on municipal infrastructure and services.

The main structural components are shown on the Plan overview attached as the first map in **Appendix 10**.

I. Trackage Infrastructure

The trackage infrastructure has been designed for fluid rail movements and operations. Rather than connecting Les Cèdres Intermodal Complex tracks directly to the main tracks of CP's Winchester Subdivision, the trackage will connect to a new parallel track (8,400 feet or 2,560 metres long) to be constructed within its existing right-of-way between Mile 24.96 and Mile 26.22 (the "**Approach Track**"). The Approach Track, in conjunction with other tracks, will allow intermodal trains to clear the main line while entering or leaving the Intermodal Complex in order to keep the Winchester Subdivision as fluid as possible. The Approach Track will also be used as a passing track by other trains on the Winchester Subdivision to increase corridor capacity. As the Approach Track is within

CP's existing railway right of way, it does not require approval under the *Canada Transportation Act* or form part of this Project Description.

The Project will require the construction of numerous tracks to perform a variety of functions. (Refer to Detailed Design Plan, also attached in **Appendix 10**.)

- a) **Lead Tracks/Wye**: The Project requires construction of two (2) lead tracks (“**Lead Tracks**”) to connect CP's Winchester Subdivision via the Approach Track with the Les Cèdres Intermodal Complex. The construction of two Lead Tracks will allow trains to access the Intermodal Complex from both east and west directions. Each Lead Track will form a seven (7) degree curve off the Approach Track into a wye before entering Les Cèdres Intermodal Complex. The two Lead Tracks will branch out into a network of tracks within Les Cèdres Intermodal Complex. The Lead Tracks will have a combined total length of approximately 7,800 feet or 2,380 metres and will be equipped with lubricators to minimize the friction of wheels on the curves.
- b) **Working Tracks (Intermodal Pad Tracks)**: Six (6) Working Tracks will be constructed in the centre of Les Cèdres Intermodal Complex. The Working Tracks are required for transferring containers between railcars and trucks as well as between railcars and ground storage. Each Working Track will have a wide lane of adjacent working space on one side to allow the Top Lifters to efficiently load and unload the containers. The length of the Working Tracks will maximize operational speed and efficiency by accommodating long intermodal unit trains and minimizing switching operations. Each Working Track will have sufficient length to stage a full length intermodal unit train (i.e., up to 10,000 feet). The Working Tracks as measured between switches will have a combined length of approximately 60,150 feet or 18,338 metres.
- c) **Runthrough Tracks (Thoroughfare Tracks)**: The Project requires the construction of two (2) Runthrough Tracks that will connect to the Lead Tracks to ensure the fluid movement of arriving and departing trains within Les Cèdres Intermodal Complex, without impacting the unloading operations on the Working Tracks. The Runthrough Tracks are long enough to hold an entire intermodal train and can be used by trains to enter or leave Les Cèdres Intermodal Complex. The tracks can also be used to stage a train for short periods of time if necessary. The two Runthrough tracks will have a combined length of approximately 16,450 feet or 5,013 metres.
- d) **Loop Tracks**: Two (2) Loop Tracks at the south end of Les Cèdres Intermodal Complex will be constructed to form a nine (9) degree loop and connect to the Runthrough Tracks, Working Tracks and Storage Tracks. The Loop Tracks will enable railcars to be turned in either an eastward or westward direction upon unloading, as required by the Operating Plan. The two Loop Tracks will have a combined length of approximately 9,100 feet or 2,734 metres.

- e) **Pullback Track:** The Project requires the construction of a Pullback Track which will be used for switching cars and building trains. The Pullback Track will connect to a Loop Track and run parallel to one of the Runthrough Tracks to facilitate fluid train movements between tracks. The Pullback Track will have a length of 6,900 feet or 2,104 metres.
- f) **Storage Tracks:** The Project requires the construction of sixteen (16) Storage Tracks for the purpose of classifying, staging and storing empty and loaded railcars. The Storage Tracks will connect to the Lead Tracks at the north end and the Loop Tracks at the south end of Les Cèdres Intermodal Complex for fluid rail operations. The Storage Tracks will have a combined length of approximately 105,100 feet or 32,033 metres.
- g) **Empty Container Track:** The Project requires construction of two (2) Empty Container Tracks to transfer empty containers between railcars and trucks as well as from ground storage to railcars. The Empty Container Tracks will have a combined length of approximately 4,900 feet or 1,493 metres.
- h) **Railcar Repair Tracks:** The Project requires the construction of two (2) Railcar Repair Tracks for the purpose of completing minor inspections and repairs on intermodal railcars (such as coupler and hose replacements and wheel set replacements) on intermodal railcars. This will enhance the efficiency of rail operations, as railcars will not have to be sent to other CP facilities for minor repairs. Major railcar repairs will continue be handled at CP's St. Luc Yard in Montréal. The total combined length of the repair tracks will be 5,000 feet or 1,524 metres.
- i) **Locomotive Track:** The Project requires construction of one (1) Locomotive Track to temporarily stage or store the two locomotives required for daily switching operations in Les Cèdres Intermodal Complex. The Locomotive Track will also be used to fuel locomotives using direct-truck-to-locomotive (“DTL”) fuelling. Integrated fuelling pads with oil-water separators will be installed for spill prevention and containment. The length of this track will be approximately 200 feet or 61 metres. The Locomotive Track will be located within the Loop Track.
- j) **Components and Materials:** The trackage infrastructure will include 76 turnouts to connect the tracks. The tracks within Les Cèdres Intermodal Complex will be constructed with steel ties (approximately 101,200) as well as other normal components such as rail, track materials, ballast, etc. The main line turnouts (14) within the signaled territory will be constructed using wood ties.
- k) **Grade Separations:** The Project will require construction of the following grade separations to avoid any at-grade crossings:
- A 24.8 metre steel-concrete structure under Mile 30.21 of CN's Kingston Subdivision to accommodate access to the Intermodal Complex via the Main

Access Road. The construction of this underpass will prevent disruptions or conflict between CN trains and traffic flows to and from the Intermodal Complex.

- A 29.6 metre skewed steel-concrete structure under the Loop Tracks to facilitate the Main Access Road. The construction of this underpass will ensure the efficient and unimpeded movement of both CP trains and traffic flows within Les Cèdres Intermodal Complex; and
- A 17.8 metre concrete structure over the Lead Tracks at Montée Chénier to allow unrestricted access for farm machinery to cross over the Lead Tracks. The construction of this overpass will ensure that CP's train operations do not impede the flow of local farm traffic.

II. **Buildings**

CP requires a variety of buildings at Les Cèdres Intermodal Complex to facilitate and integrate rail and truck operations:

- a) **Main Administration Building:** A two-story Main Administration Building is required for management and supervisory staff at Les Cèdres Intermodal Complex. The Main Administration Building will be approximately 450 square metres (4,850 square feet) and includes offices, a conference room, a lunch room, washrooms and locker rooms.
- b) **Maintenance Building:** A single-story Maintenance Building of approximately 1,800 square metres (19,400 square feet) is required for equipment maintenance and staff functions, including:
 - i) A working area for the maintenance and repair of equipment used to move containers within the Intermodal Complex (i.e., Top Lifters and hustler tractors). Routine inspections, maintenance and repairs such as tire repairs and parts replacement will be conducted inside the Maintenance Building. No locomotive or railcar repairs will be performed within the Maintenance Building. Locomotive repairs and major railcar repairs will continue to be completed at CP's St. Luc Yard in Montreal.
 - ii) Space for the storage of spare parts for the equipment.
 - iii) Space for the storage of Top Lifter equipment, hustler tractors and any other equipment required to operate Les Cèdres Intermodal Complex.
 - iv) Facilities for operations and maintenance staff including offices, a lunch room, washrooms and locker facilities.
- c) **Distribution Centres:** The Project requires the construction of two single-story warehouse and distribution centres (the "**Distribution Centres**") of respectively 160,000 and 13,950 square metres, to allow for loading, sorting and consolidating merchandise between rail and truck modes. Each will include a warehouse for temporary storage and a crossdock facility to sort out freight by deconsolidating the merchandise received in containers and reassembling the merchandise into truckloads destined to various industries and retail businesses (situated mostly in

Eastern Canada). In addition, merchandise will be brought by truck to the Distribution Centres and loaded into containers, which will then be returned to various city or port destinations via rail. The Distribution Centres will also include office space, washrooms and lunch rooms for staff working in the buildings.

- d) **Entrance Canopy and Staff Kiosks:** The Project requires construction of a canopy over the truck entrance to Les Cèdres Intermodal Complex to allow for the processing of documents out of the weather elements and the inspection of incoming and outgoing containers. Kiosks for staff processing incoming and outgoing trucks and containers will be located beneath the canopy. From the kiosks, the staff will control access to the Intermodal Complex through the automatic access gates and ensure the security of the Intermodal Complex. (See Section IV e) Fencing and Security for further security information.)
- e) **Truck Weigh Scale:** A truck weigh scale will be installed to allow truck drivers to weigh their loads at Les Cèdres Intermodal Complex.
- f) **Salt Shed:** The Project will require construction of a covered salt shed to store road salt for use in winter months on the roads within Les Cèdres Intermodal Complex.
- g) **Compressor Shed:** A compressor shed (prefabricated building) will be installed to house a high capacity compressor to allow efficient train air brake loading tests prior to departure.
- h) **Temporary Structures:** CP anticipates that a limited number of temporary structures will be required during the construction phase:
 - Several modular offices to provide temporary office space and lunch rooms for construction and supervisory personnel. The portable structures will be approximately 12 feet by 24 feet.
 - self-contained portable toilet facilities for use by the construction workers.

III. Roadways, Parking and Storage Areas

The Project will require construction of a variety of roadways, parking and storage areas to achieve the main principles of physical and functional integration of rail and truck operations and site self-sufficiency in terms of infrastructure:

- a) **Main Access Road:** One of the three main principles that has guided the conceptual development of the Project is **dedicated road access** from Highway 20 to the site **to minimize the impact** of trucks and vehicle traffic on the Municipality of Les Cèdres. The Main Access Road will be one of the first components constructed, as it will serve as the conduit for materials that must be transported to or from the site by truck during the construction phase. The Main Access Road will also provide primary access to the Project site for equipment, as

well as construction workers and supervisory personnel. This will minimize the potential for construction activities to disrupt traffic flows on local roads and the surrounding community – one of CP’s key commitments to the community of Les Cèdres. Dedicated road access is also critical to the operation of Les Cèdres Intermodal Complex as it will minimize the potential for intermodal truck traffic to disrupt local road traffic and the community and provide for fluid truck movements between the highway network and Les Cèdres Intermodal Complex.

The Main Access Road proposed by CP (as shown on the map in **Appendix 11, Figure 2**) is the result of extensive study and consultation with stakeholders. CP, the Municipality of Les Cèdres and MTQ concluded that **two options** should progress to MTQ’s thorough validation process. The validation process included key considerations such as:

- the appropriate configuration to meet provincial safety standards;
- minimizing the amount of agricultural land required;
- minimizing the impact on local/municipal roads and no interference with Chemin St Féréol, the main entrance to the municipality.

Other considerations included the optimal timeline for construction and the associated cost. MTQ validated the parameters for both options and **Appendix 11** contains the detailed report covering all aspects for both options along with MTQ’s letter validating the two options.

Following MTQ’s validation for both options, the Municipality of Les Cèdres and CP again reviewed the options and concluded that the option requiring the construction of a private road and the enhancement of the existing Interchange 22 (Highway 20) best met the considerations and concerns identified by the municipality as well as MTQ’s safety requirements. The selected option contains two components:

- Enhanced Interchange 22: Interchange 22 will be enhanced and enlarged by adding one lane in each direction. Acceleration lanes will also be enhanced from Interchange 22 to Highway 20. The enhancement to Interchange 22 will be constructed by MTQ or one of its agents and remain the property of MTQ. Construction is anticipated between 2011 and 2013, with completion required prior to the commencement of the new Intermodal Complex.
- Main Access Road: A four-lane paved dedicated access road (two lanes in each direction) will be constructed from Interchange 22 to the Intermodal Complex. It will parallel Highway 20 and then curve north to enter the Project site. This private road will be constructed, owned and maintained by CP and have a length of approximately 2,300 metres. Construction will commence after obtaining all applicable approvals, anticipated to be 2009 (the “**Selected Option**”).

The Selected Option has the following advantages:

- It uses the existing transportation infrastructure at Interchange 22.
- It best meets the MTQ safety criteria that no new entry/exit onto Highway 20 be created as a result of the Project.
- It requires only nine (9) hectares of agricultural lands compared with 32 hectares for the other option – an important consideration in the agricultural community.
- The route parallel to Highway 20 will minimize the fragmentation of agricultural land and other potential impacts by running adjacent to an existing transportation corridor.
- the duration of construction is only eight (8) months compared with over eighteen (18) months for the other option.

The Selected Option includes several other important aspects necessary to achieve the three main principles of Project development:

- It provides a direct connection to Highway 20 (part of the **Trans-Canada Highway network**), connecting Montréal and Toronto.
- It minimizes the presence of trucks on local roads and visual and traffic impacts on the municipality's main road, Chemin Saint-Féréol.
- It facilitates and supports efficient truck movement for the pick-up and delivery of containers and access to other truck-related facilities within the Intermodal Complex.

The existing Montée Sullivan road that abuts the site will provide secondary access to the Project site during the construction phase; however, it will not be used provide access to or from the from Les Cèdres Intermodal Complex after completion of the Project, except for emergency access by local emergency responders.

- b) **Interior Roadways:** Upon entering the south end of Les Cèdres Intermodal Complex, the Main Access Road will branch into two main interior roadways. One road will provide access to and from the Distribution Centres and the other interior road will provide access for CP staff entering and leaving Les Cèdres Intermodal Complex, as well as provide dedicated access for trucks. A total of seven (7) truck lanes will lead to the Kiosks comprising five (5) inbound lanes and two (2) outbound lanes. The inbound lanes will have the capacity to queue up to 30 trucks, thereby ensuring that truck queues will stay well inside Les Cèdres Intermodal Complex. Inbound trucks will be processed at the Kiosks quickly due to the installation of automated gates, further ensuring that long queues of inbound trucks do not form. The interior roads will have a total length of approximately 1,600 metres.
- c) **Parking Areas:** A number of parking areas will be required for staff working at Les Cèdres Intermodal Complex as well as for intermodal trucks and their equipment:

- i) a paved parking area for staff working in the Main Administration Building and Maintenance Building with 75 parking stalls;
 - ii) a paved parking area for personnel working at the Distribution Centres as well as for trucks picking up or dropping off merchandise with approximately 650 parking stalls;
 - iii) a paved truck trailer parking area for parking empty trailer chassis and trailers with loaded or empty containers with approximately 525 parking stalls. This parking area will be used as a staging area outside of the truck pick up and drop off area; and
 - iv) a paved truck tractor parking area with a capacity of approximately 150 parking stalls.
- d) **Storage Areas:** A number of storage areas will be required to facilitate the efficient transfer of significant volumes of containers between rail and truck modes:
- i) a paved container storage and maintenance area for refrigerated containers with electrical power plug-in stations for operating the refrigeration units (13,950 square metres);
 - ii) a container storage area (378,000 square metres), with a paved surface, located between the Working Tracks to store loaded containers for loading on to railcars or trucks;
 - iii) a paved storage area for empty containers (152,900 square metres); and
 - iv) a paved storage area for railcar wheels and equipment (1,400 square metres).
- e) **Top Lifter Fuelling Pad:** The Project will include construction of a fuelling pad (including spill containment) to fuel the Top Lifters and related equipment captive to Les Cèdres Intermodal Complex site.

IV. Utilities and Related Service Infrastructure

A variety of utilities and related service infrastructure will be required to ensure that Les Cèdres Intermodal Complex is self-sufficient in terms of infrastructure:

- a) **Water Supply:** A key feature of the Project is a **self contained water supply system including a fire protection system**, as CP anticipates that the Municipality of Les Cèdres will not be able to supply sufficient water resources to Les Cèdres Intermodal Complex and wishes to minimize impacts to the Municipality and its infrastructure. CP anticipates constructing an independent water supply system linked to an underground water tank. The tank will be comprised of three separate compartments, each with an independent pump. This will ensure multiple independent water sources for the fire protection system. The underground tank will connect to an underground loop line surrounding the entire site to ensure the supply of water to the fire hydrants and buildings.

CP proposes to draw drinking water from the St. Lawrence River via a 150 millimetre (6 inch) water main installed along the Chemin Saint-Dominique. CP anticipates that a water treatment facility will treat drinking water on site to meet the province's and Health Canada Drinking Water Quality Guidelines. It is anticipated that the water treatment process selected for the Intermodal Complex will follow a conventional process using coagulants, coagulant aids and disinfectant chemicals (e.g., sodium hypochloride). Projected volumes of sodium hypochloride required on a monthly basis are three (3) to six (6) 45 gallon drums. This form of sodium hypochloride poses limited health and safety issues when used as directed.

CP will outsource the management of the water treatment system to a licensed firm that specializes in water treatment to ensure that all aspects of the treatment process (e.g., chemical use and storage) and quality of treated water are in compliance with applicable regulations and requirements.

b) **Wastewater:** CP anticipates that the Municipality of Les Cèdres will not have sufficient infrastructure capacity to provide wastewater treatment for Les Cèdres Intermodal Complex and, as a result, CP anticipates that it will need to construct a wastewater treatment and discharge system within the Project site with a capacity of 70,000 gallons per day (315 m³/d). CP's preliminary concept involves the following features:

- i) A wastewater collection system to collect sanitary waste from all buildings. Primary treatment will include screening and flow measurement.
- ii) A small building (approximately 8 metres by 20 metres) for the primary treatment equipment including a small lab, operator work station, electrical room and equipment storage area.
- iii) Three aerated lagoons to retain wastewater for secondary treatment with a combined capacity of 661,000 gallons (3,000 metres³). Secondary treatment will involve microbiological and chemical treatment processes for periods ranging from 15 to 30 days. Due to the biological and aerated aspects of treatment, this process is not expected to generate odours. Sludges accumulating within the lagoons will require periodic removal (typically at a 10 to 15 year interval) and disposal at an approved facility. Wastewater quality and quantity will be monitored by a specialized and licensed firm to ensure compliance with federal and/or provincial requirements prior to discharge from the lagoons.
- vi) A treated wastewater discharge system that conveys treated wastewater via a buried 150 millimetre diameter pipe installed along Chemin Saint-Dominique to the St. Lawrence River.

CP is currently studying the various treatment options available and most suitable process to incorporate into a detailed design plan for Les Cèdres Intermodal Complex.

- c) **Storm Water**: A storm water management system will be constructed to manage drainage within Les Cèdres Intermodal Complex and to ensure that no drainage-related impacts occur on adjacent lands (including farms). The proposed storm water management system contemplated for the Intermodal Complex addresses both storm water quantity and quality and includes:
- i) Four (4) independent systems that largely correspond to the existing drainage basins. Storm water will be directed from catch basins and foundation drains to constructed retention ponds.
 - ii) Four (4) oil-water separators, situated up-gradient of the storm water ponds to capture and retain hydrocarbons carried by storm water.
 - iii) Four (4) large, elongated retention ponds located along the perimeter of the Project site. The storm water ponds will be designed to ensure settlement of suspended sediments and “dampen” potentially erosive peak flows prior to discharge to the existing network of natural and managed receiving channels.
 - iv) Four (4) pumping stations to maintain the storm water at preferred levels and regulate the flow to one of the four natural and managed receiving channels surrounding the site. A fifth pumping station will ensure that storm water collected from the CN and Loop Track underpasses are discharged towards one of the four retention ponds for flow regulation.
 - v) A network of drainage pipes and culverts to control the discharge of water into the natural and managed receiving channels. The rate of discharge will be in accordance with municipal requirements.
- d) **Lighting**: CP proposes to install the following lighting infrastructure at the Intermodal Complex:
- i) Forty (40) flood light poles on the outside of the storage tracks; and
 - ii) Sixty (60) high mast light towers measuring approximately 33 metres high (110 feet). Each tower will be equipped with twelve (12) 1,000 watt lamps to light Les Cèdres Intermodal Complex at night.
- The lighting will be directed downwards to minimize lighting impacts at night on the surrounding area. Although a small local airport (the Saint-Lazare Airport (Cooper)) is in the vicinity of the Project site, it is not certified for night flying and therefore no impact is anticipated from the lighting at Les Cèdres Intermodal Complex. CP will ensure at the detailed design phase that the lighting will not create a problem for airport operations.
- e) **Fencing and Security**: Les Cèdres Intermodal Complex will require the installation of fencing for security and safety purposes, including perimeter fencing, security gates at the truck entrance and internal fencing to separate various work areas (including the Distribution Centres). Closed circuit security cameras will also be installed for security purposes. The installation of automated security gates at the truck entrance is also important to facilitate efficient truck movements. Automated gates will allow CP to process a truck through the gates in less than one minute, as opposed to a conventional gate (at the Lachine Intermodal Facility) that can take up to three (3) minutes to process a truck.

- f) **Fueling Tank and Containment Facility:** CP anticipates that one (1) fuelling tank (capacity of 20,000 litres) will be required at the Top Lifter Fuelling Pad for fuelling Top Lifters and other equipment captive to Les Cèdres Intermodal Complex. The tank will be supported by secondary containment of its full volume and comply with applicable regulations and CP's Storage Tank Management Policies and Procedures.
- g) **Landscaping:** Another key component is perimeter landscaping with native trees and other native species to provide an aesthetically-pleasing vegetative buffer between Les Cèdres Intermodal Complex and surrounding areas. CP will construct a one metre high berm around the perimeter of the Project site with planted trees and other vegetation to provide a visual screen of on site operations (including stacked containers) from surrounding public road network. The berm and vegetation will be integrated with the perimeter drainage network.
- h) **Other Service Infrastructure:** Other required service infrastructure includes the following:
- i) **Electric Power during Construction:** Electric power is already provided to the former Soulanges Industries site and will be available during the construction phase. A temporary source of electric power will be required for construction outside of the former Soulanges Industries site (i.e., Main Access Road construction) during the first year of construction. It is anticipated that the temporary power requirements of initial construction will be supplied by on site hydrocarbon-fuelled generators; however, it is anticipated that by the second year of construction, electric power will be provided to the entire site through the local Hydro-Québec network and generators will not be required.
 - ii) **Permanent Electric Power:** A permanent source of electricity to service the buildings, indoor and outdoor lighting, and plug-in stations for refrigerated containers will be provided through the local Hydro-Québec network via Chemin Saint-Féréol, using the existing 25 kV line along Montée Sullivan. A detailed analysis of the available electrical supply will be performed by Hydro-Québec to determine the specific details and requirements for electrical supply to the site. Twenty-five (25) electric plug-in stations for refrigerated containers will be installed.
 - iii) **Natural Gas:** A permanent supply of natural gas used to heat the on site buildings will be installed through the local Gaz Métropolitain network.
 - iv) **Telecommunications Services:** Telecommunication services will be installed to service the Main Administration Building, Maintenance Building and Distribution Centres. As the Project site is located in the strategic Montréal-Toronto corridor, direct access to existing

telecommunications infrastructure is readily available. Vidéotron, Bell and Allstream all have facilities near the site. Fiber-optic and microwave links could be added to complement existing facilities; however, CP does not anticipate that communication towers will be required.

2.2 Project Activities

2.2.1 Construction, Operation and Decommissioning phases

2.2.1.1 Construction Activities

A number of pre-construction activities will be required to complete the vertical and horizontal alignment grade designs, as follows:

- Surveying - Site surveying will be completed to map all existing physical, environmental and archeological/historical (if any) features required for the final design process and to record specific data related to environmental and geotechnical investigations. The survey data will be used to determine:
 - final elevations and gradients for the trackage;
 - the final design for grade separations including the two underpasses;
 - cut and fill quantities;
 - design gradients for drainage and drainage networks;
 - final design for roadways including the Main Access Road;
 - timing and methodology of construction activities.
- Geo-technical Investigations - Bore holes and/or shallow excavations will be made at regular intervals to determine the nature of subsurface soil conditions, as well as ground water table elevations. This information will be used to finalize the designs and determine areas where sub-excavation and granular backfill materials (or other special construction requirements) may be required to provide adequate support for infrastructure, including the track and underpass/overpass structures. A pre-load test was carried out during the summer of 2007 to monitor *in situ* the behaviour of the underlying clay under simulated service loads.

There are no unusual construction activities anticipated for the Project. CP anticipates the following construction activities:

- Clearing and removal of vegetation – the abundant herbaceous (primarily grasses and agricultural crops) vegetation of the Project site will be mulched with brush and small trees up to 25 centimetres in diameter, mixed with topsoils and retained on site for landscaping and reclamation. CP will use the topsoil to build a one metre high berm around the perimeter of the site and re-vegetate to create the aesthetic buffer between the Project site and adjacent properties. The few trees larger than 25 centimetres diameter will be cut to length and hauled to an approved site for use as firewood and/or approved disposal.

- Removal of existing rail and one remaining building on the Project site. The 100 lb. rail will be set aside and re-used for flange rail in the paved area. The balance will be sold for metal recycling.
- Excavation for the underpasses, roads and buildings - unsuitable cut materials (mostly clay) will be excavated and used wherever possible within the Project site (i.e., perimeter berms) in order to minimize the amount of unsuitable material that will require off site disposal.
- Sub-excavation – where necessary, unsuitable materials will be removed below the design cut elevation. Unsuitable materials will be used wherever possible within the Project site or CP’s right-of-way in order to minimize the amount of material that will require off site disposal.
- Granular material placement – granular material will be placed to fill sub-excavated areas or build up the structure of track beds, road beds and parking, storage and loading areas.
- Grading of the Project site – grading activities will including surface grading, as well as grading for ditches and culverts.
- Grade-separation construction – grade separations will require the construction of retaining walls. There are a variety of retaining walls that could be used to support or contain embankment materials where necessary. The type of wall selected will be specific to the design requirements. A temporary diversion of CN’s Kingston Subdivision Mainline Tracks (2) between Mile 29.81 and Mile 30.61 will be undertaken to enable the construction of the underpass structure at Mile 30.21.
- Construction of the water, wastewater and storm water management infrastructure – construction will include the installation of the underground piping, a water storage tank, lagoons, ditches and retention ponds, pumping stations and culverts (including excavation, placement of bedding materials, infrastructure installation, backfill and inlet/outlet structures).
- Overhead utility relocation – existing overhead utilities will be raised to provide adequate railway clearances or relocated. CP will work with utility owners to ensure proper design and completion of any utility relocation.
- Construction of main components – construction will include construction of trackage infrastructure (laying of sub-ballast, ballast, ties and track) and all buildings.
- Paving – all roads, parking and storage areas will be paved.
- Installation of new utilities and related service infrastructure - electrical and telephone services may be run overhead or buried underground. Natural gas will

be installed underground. Lighting, fencing and security infrastructure will be installed.

- Re-vegetation and landscaping - a perimeter berm will be constructed and landscaped using the original topsoil and native species. Trees from the commercial tree nursery will be used as much as possible for the perimeter landscaping.

2.2.1.2 Operations

Refer to **Appendix 12** for a Preliminary Operating Plan describing the operations at Les Cèdres Intermodal Complex including environmental and emergency response plans.

2.2.1.3 Decommissioning

Once constructed, CP will operate Les Cèdres Intermodal Complex on a continuous basis and no decommissioning activities will be required in the foreseeable future (at least 50-60 years).

The Lachine Intermodal Facility will remain a CP rail facility serving non-intermodal traffic after completion of the Project and CP does not anticipate decommissioning the site.

2.2.2 Construction Schedule

Construction of the Project will commence as soon as the federal environmental screening is completed and approvals are granted by the applicable authorities. The Project will be undertaken and completed over several construction seasons. Track construction typically does not occur during winter months when the ground is frozen and covered with snow. The following is a preliminary schedule:

| | |
|--|-----------|
| Environmental screening process | 2008 |
| Tendering of construction activities | 2008-2009 |
| Grading, excavation and main line right-of-way work including trackage and signals | 2009-2010 |
| Construction of Main Access Road, diversion of CN Tracks and Underpass | 2009-2010 |
| Excavation, granular foundation and drainage work at Project site | 2011-2012 |
| Construction of buildings and structures; paving | 2011-2012 |

| | |
|--|------------|
| Construction of trackage within Project site | 2012-2013 |
| Project Completion | Q3 of 2013 |

2.2.3 Site plans/sketches

See **Appendix 13** for the Project site plans identifying the Project structures/components, road and utility infrastructure and topographical features.

2.2.4 Engineering Design Details

All track and turnouts will be constructed in accordance with CP’s Engineering Services Red Book of Track Requirements, effective November 1, 2005 and the American Railway Engineering and Maintenance of Way Association (AREMA) standard specifications.

The grade separations will be constructed in accordance with the current AREMA standard specifications for design and construction.

Ballast will be sourced to meet CP engineering and environmental specifications.

2.2.5 Off Site Land Use Requirements

During construction, most activities will occur on the Project site, such as grading and track construction. Final designs will endeavor, as much as possible, to create a cut/fill balance on the Project site in order to minimize the distances over which materials need to be moved. To the extent there is an imbalance of cut/fill requirement, excess cut materials will typically be used on site for construction of the road bed to minimize the amount of off site fill required. (See Section 2.3.2 for off site raw materials required). CP anticipates that approximately 550,000 cubic metres (mostly clay) will be sent off site to an approved landfill. **Rail and other track materials will be transported via rail to the site, reducing the need for off site trucking.** In addition, the Main Access Road (private road) will connect directly to Highway 20 via interchange 22 and trucks, construction crews and construction equipment will not need to use surrounding local roads. As a result, negative effects to off site landowners and land uses will be minimized.

2.3 Resource/Material Requirements

2.3.1 Specialized Production Processes

There are no specialized construction or production processes associated with this Project.

2.3.2 Raw Materials Required

The primary raw material used for constructing the Project components, including road and track beds, will be material excavated from within the Project site. The following quantities of imported materials will be used for the track bed, roadways, parking lots and storage areas:

- a. Crushed ballast rock for track construction – CP estimates that approximately 185,000 tonnes of ballast rock will be required for track construction. Ballast rock is usually sourced from CP's own mine sites to meet CP's specifications and transported via railcar over CP's railway lines.
- b. Sub-ballast granular materials – CP estimates that approximately 900,000 cubic metres of granular fill will be required to create a base for the tracks, roadways and storage areas.
- c. Asphalt – CP estimates that approximately 135,000 cubic metres of asphalt will be required to pave roadways, parking and storage areas.

Typical building materials including timber, concrete, masonry and steel will be used to construct the buildings, including the Main Administration Building, Maintenance Building and Distribution Centres. The quantities of building materials are yet to be determined.

2.3.3 Energy Requirements

Construction energy requirements for the Intermodal Complex will be typical of construction sites. Fuel will be required for machinery and electrical energy will be required for lighting and other construction activities. Electrical power is already connected to the former Soulanges Industries site; however, during the first year of the Project construction phase, on site generators will be required to provide temporary electric power outside of the former Soulanges Industries site (i.e., Main Access Road construction).

2.3.4 Water Requirements

Water requirements will not be significant during construction and will mostly be used for compaction and dust control during summer construction. Construction-related water will be sourced from the existing water feed at the former Soulange Industries site.

2.3.5 Hazardous Materials

The only hazardous materials required for during construction of the Project will be a moderate amount of fuels, lubricants and other hydrocarbon-based products required for equipment operation and servicing. After construction is completed, chemicals used for water/waterwater treatment will be stored on site in small quantities under controlled and secure conditions.

2.4 Waste Management

2.4.1 Nature of Wastes Generated

Waste material which is likely to be generated as a result of this Project, potential disposal mechanisms, as well as waste management considerations are provided in the following table:

| Waste | Source | Disposal Method | Management Consideration |
|-----------------------------|--|--|---|
| Soils, fill material | Excavation | Re-use within Project site (i.e., berms, road base, suitable landfill) | Preference is to use soils on site wherever possible. The Soulanges Industries site has been remediated by prior owner, however, untested parcels/soils may require chemical testing for potential contamination (e.g., TCLP testing). If any contaminated soils are detected, soils will be disposed at an approved facility. Mitigation measures are always employed by CP to prevent spread of any potentially contaminated materials (i.e., proper on site storage, transport, drainage). |
| Organics (vegetation, wood) | Vegetation, tree clearing, grubbing | Re-use as mulch amendment to topsoil; transplant on site trees; suitable landfill, wood given away as firewood | Clearing to be minimized to greatest extent possible. Mulch herbaceous vegetation and brush and use as an amendment to on site topsoil; transplant existing trees where possible including trees from the nursery. Municipality may have alternative disposal methods available (e.g., composting, recycling chip wood). |
| Existing rail | Construction activities | Re-use within Project site, sell for metal recycling | 100 lb. rail will be re-used in the Project. Balance of rail, of CN design (not CP), will be sold to metal dealers to be melted down and recycled into new products. |
| General construction debris | Construction activities | Suitable landfill | Construction debris anticipated to be minimal. |
| Solid waste (garbage) | Construction crew | Landfill | Suitable containment facilities maintained on site and site best management practices implemented to maintain overall cleanliness. |
| Human sewage | Self-contained toilets for construction crew use | Hauled off site to suitable disposal location by toilet provider | No discharge to local environment. |

2.4.2 Hazardous Material Disposal Procedures

It will not be necessary to store hazardous materials on the Project site during construction, other than limited quantities of fuels and lubricants for construction equipment.

Upon completion of the Project, Les Cèdres Intermodal Complex will require one fuel tank (with secondary containment) for fuelling equipment captive to the site such as Top Lifters. Fuel transfer operations will be conducted at the Top Lifter Fuelling Pad, in accordance with applicable regulations and CP's Storage Tank Management Policies and Procedures. Locomotives will be fuelled at Les Cèdres Intermodal Complex directly from trucks ("DTL") and, as a result, locomotive fuelling tanks will not be required. CP's fuelling policy and procedures for DTL fuelling will be followed to minimize risk of spills. In addition to the policies and procedures, a site-specific spill prevention plan will be prepared and appropriate spill containment/clean-up equipment will be maintained on site at all times. Integrated fuelling pads with oil-water separators will be provided for the Locomotive Track and all areas where locomotives are parked or stationary will have track mats installed as part of CP's spill prevention and containment measures. Storage will not be permitted within 100 metres of waterways or drainage courses.

Concrete will be required for footings, foundations and grade separation structures. All concrete will be batched by an approved facility. In the event of a spill, appropriate clean-up procedures will be proposed as part of the site-specific spill prevention plan noted above, as well as the environmental management plan which will be prepared by CP.

3.0 PROJECT SITE INFORMATION

3.1 Project Location

The Project is located in the Municipality of Les Cèdres, within the RCM of Vaudreuil-Soulanges in the Province of Québec. The 313 hectare Project site is located some 35 kilometres south-west of Montréal and three (3) kilometres north of the St. Lawrence River.

The site is an irregular rectangular shape and is situated between CP's Winchester Subdivision to the north, CN's Kingston Subdivision to the south, the Chemin Saint-Dominique to the west and the Chemin Saint-Féréol to the east. A map of the regional area and the Project site is provided in **Appendix 3**.

CP completed an exhaustive search for potential sites in Québec based upon the general requirements for an intermodal facility as described in Section 1.1. The Project site located in the Municipality of Les Cèdres was chosen by CP as the most optimal for the following reasons:

- The Project site is adjacent to CP's Winchester Subdivision. CP previously had a spur that connected the mainline to the site and a connection to the site could easily be re-established.

- The Winchester Subdivision is on CP's main east-west rail transportation corridor directly connecting the greater Montréal region to Toronto and Vancouver. Montréal is the end point for CP container unit trains originating from the Port of Vancouver with merchandise destined for retail markets in Québec, eastern Ontario and the Maritimes.
- The site is well suited for rail construction. The land is flat and presents no physical obstacles to development of the Intermodal Complex. The site is also large enough to accommodate long tracks that can hold modern trains with lengths of up to 10,000 feet.
- The Project site is located at the entrance of the greater Montréal area and in the heart of a major highway network. The site is accessible by Highway 20, Highway 40 and the future Highway 30 – a ring road that will bypass the island of Montréal. The close proximity of the site to the major highway network will minimize the impact of truck traffic on the local road network and ensure efficient truck operations.
- The Project site is large enough to enable the construction of integrated distribution centres and a modern intermodal facility with a capacity to handle up to 550,000 containers per year, representing more than double the designed capacity at CP's Lachine Intermodal Facility.
- The core of the Project site is already devoted to an industrial use. One hundred and seventy-two (172) hectares of the total 313 hectare site (55%) was acquired by CP in October 2006 from one owner, Soulanges Industries. The site was originally used as an industrial site by the Canadian Armed Forces to store ammunition and explosives during the Second World War. The Canadian Government selected this location in the Municipality of Les Cèdres because the site was isolated and a considerable distance from homes located on Chemin Saint-Dominique and Chemin Saint-Féréol, as well as Les Cèdres' town centre. In addition, the site was adjacent to two national railway mainlines – CP and CN. These same considerations remain today and were important selection criteria for CP in favouring the Project's location in Les Cèdres.
- The remaining 141 hectares required for the Project have been developed as cultivated lands. A large portion of the lands are currently used as a commercial tree nursery and CP has been able to limit impacting local dairy farms (see Section 1.3.2. for land use details). Through CP's extensive consultation in the community, CP has obtained Options for more than 95% of the remaining land from owners who are willing to sell.
- The Project site has been identified by the Vaudreuil-Soulanges Local Development Centre ("CLD") as a future intermodal hub. The CLD prepared an economic report in April, 2005 featuring the Project site as having the potential to develop into an intermodal facility. The key operations of Les Cèdres Intermodal Complex, namely multi-modal (rail-truck) transportation, warehousing and distribution activities, respond well to the CLD mission of transforming the Vaudreuil-Soulanges region

into a value-added integrated transportation hub. The CLD supports the Project as an important factor in fulfilling their economic mission.

3.2 Environmental Features

The following is a summary of the physical and biological components in the Project area likely to be affected by the Project. The environmental and cultural features of the Project area, together with the locations of the main components of the Project, can be seen on the map attached as **Appendix 14**.

3.2.1 Climate

The climate in this area of the St. Lawrence Valley is classified as “cold humid temperate” (Trewartha, 1961). This climate classification is evidenced in the meteorological data that has been collected by Environment Canada at Les Cèdres for a number of decades (Environment Canada website, 2007). Ambient air temperatures have been measured for the climate normal period of 1971-2000. Regional temperatures during this period varied between a daily average low of - 9.9°C in January and a daily average high of 21°C in July. The ground can freeze to a depth of up to one (1) metre for a period of four (4) to six (6) months, typically between the months of November and April. The total annual rainfall for the same record period averaged 950 millimetres with highest monthly rainfall typically occurring in July. The average annual snowfall over the record period was approximately 180 centimetres.

3.2.2 Terrain and Soil

The Project site is characterized by flat lowlands typical of the St. Lawrence Lowlands physiographic unit (Natural Resources Canada, 2007). Ground elevations vary between 49 and 54 metres above sea level and slope gently (gradient less than 1%) in a south-south-easterly direction towards the St. Lawrence River. More than a century of agricultural use of these lowlands has significantly altered the terrestrial and aquatic natural features of the landscape.

Topsoil is described as ranging from very loose, silty sand and clay to soft, yellow clay silt with organic components. Thick (>20 m) clays underlie the topsoil in three distinct layers of varying stiffness and water content. Although the deep clays of the region do not offer good potential for aquifer exploitation, underlying geologic formations are reputed to be among the best aquifers in the Province of Québec (Bériault and Simard, 1978).

3.2.3 Vegetation

The Project area is situated in the Great Lakes/St. Lawrence Forest Region (Hosie, 1979). Much of the native vegetation of the St. Lawrence lowlands was cleared many decades ago in support of agricultural development. Close to 90% of the lands in the Municipality of Les Cèdres have been converted to agriculture. Forest cover in the Project area is now limited to small woodlots of lowland deciduous species such as the sugar maple (*Acer*

saccharum), trembling aspen (*Populus tremuloides*), white ash (*Fraxinus americana*) and elm (*Ulmus Americana*) (Agence Forestière de la Montérégie, 2006). These remnant woodlots have been subject to clear-cutting at one time or another in the past. There are no “exceptional forest ecosystems”, as recognized and documented by the Ministry of Natural Resources and Fauna of Québec (“MNR”), in the area.

Vegetation on approximately 90% of the former Soulanges Industries property, representing the core of the Project site, is dominated by common native and non-native species of herbaceous ground cover (i.e., **grasses, clovers**). The remaining 10% of this property is covered with 10 small regenerating deciduous woodlots. The lands adjacent to the former Soulanges Industries property are agricultural, comprised of a commercial tree nursery, field crops (corn, organic sunflowers and soya) and three (3) fragmented maple groves.

Vegetation found within and adjacent to drainage ditches and creeks (i.e., riparian areas) of the Project site support a distinct vegetation community that is generally characterized by dense stands of common species such as cattail (*Typha sp. L.*), purple loosestrife (*Lythrum salicaria L.*) and reed canary grass (*Phalaris arundinacea L.*), as well as scattered clumps of dogwood (*Cornus stolonifera Michx.*), alder (*Alnus sp.*) and Manitoba maple (*Acer negundo L.*). Riparian vegetation of the St. Lawrence River, in the area proposed for water intake and discharge infrastructure, is dominated by deciduous trees and shrubs.

There are no wetlands as defined in the *Canadian wetlands classification system* within or immediately adjacent to the Project site.

Representative photographs of vegetation communities of the Project site are shown in **Appendix 15**.

3.2.4 Wildlife

Wildlife habitat in Les Cèdres has been significantly altered and replaced by a long history of agricultural operations and industrial development. **Few natural habitats remain on the Project site** resulting in an assemblage of wildlife species (i.e., mammals, birds, amphibians and reptiles) that is tolerant of this level of disturbance and has adapted to these land uses.

Several wildlife sightings within the Project site have been made during various site visits to-date. Species observed directly, or whose presence was inferred from animal sign, are listed below. All of these are considered to be common to the region.

| Common Name | Scientific Name |
|-------------------------|-------------------------------------|
| <i>Birds</i> | |
| Alder Flycatcher | <i>Empidonax alnorum</i> Brew. |
| American Crow | <i>Corvus brachyrhynchos</i> Brehm. |
| American Kestrel | <i>Falco sparverius</i> L. |
| American Robin | <i>Turdus migratorius</i> L. |
| Black and White Warbler | <i>Mniotilta varia</i> L. |

| Common Name | Scientific Name |
|---------------------------|---------------------------------------|
| Birds | |
| Blue jay | <i>Cyanocitta cristata</i> L. |
| Bobolink | <i>Dolichonyx oryzivorus</i> L. |
| Canada Goose | <i>Branta canadensis</i> L. |
| Common Yellowthroat | <i>Geothlypis trichas</i> L. |
| Eastern Wood Pewee | <i>Contopus virens</i> L. |
| Hairy Woodpecker | <i>Picoides villosus</i> L. |
| Killdeer | <i>Charadrius vociferus</i> L. |
| Northern Harrier | <i>Circus cyaneus</i> L. |
| Osprey | <i>Pandion haliaetus</i> L. |
| Ovenbird | <i>Seiurus aurocapillus</i> L. |
| Ring-billed Gull | <i>Larus delawarensis</i> Ord. |
| Song Sparrow | <i>Melospiza melodia</i> Wilson. |
| Yellow-bellied Flycatcher | <i>Empidonax flaviventris</i> Baird. |
| Yellow-bellied Sapsucker | <i>Sphyrapicus varius</i> L. |
| Mammals | |
| Groundhog | <i>Marmota monax</i> L. |
| White-tail Deer | <i>Odocoileus virginianus</i> Zimmer. |

The St. Lawrence River valley is part of the Atlantic Flyway used by migratory birds for their spring and fall migrations. Important water bird habitats have been documented along the St. Lawrence River and Lac-des-Deux-Montagnes; however, the closest of these habitats (St. Lawrence River) is located more than three (3) kilometres away from the Project site.

A number of wildlife species of special conservation status in Québec and/or Canada have been identified in the regional area and have the potential to inhabit the Project site. These wildlife species are listed below; however, none of these species have been identified in the Municipality of Les Cèdres.

| | |
|------------------------|----------------------------|
| • Small-footed bat | • Red bat |
| • Woodland vole | • Eastern pipistrelle |
| • Hoary bat | • Rock vole |
| • Silver-haired bat | • Southern flying squirrel |
| • Southern bog lemming | • Grey fox |

Wildlife habitats protected by provincial legislation are well removed (i.e., >5 kilometres) from the Project site.

3.2.5 Aquatic Features/Resources

The Project site is drained by a network of constructed ditches and channels. These low-gradient headwater channels convey intermittent flow to three watersheds flowing northeast, east and south of the Project site. A brief description of each headwater network of channels is presented below. Their locations are identified on the Environmental and Cultural Features map included as **Appendix 14**. Major water bodies and watercourses of the regional area of the Project site include Lac-des-Deux-Montagnes and the Outaouais River to the east of the Project site and the St. Lawrence River to the south. Aquatic features in the vicinity of the Project site are described below.

a) Wallot Creek

The headwaters of Wallot Creek arise to the north and west of the Project site. A network of constructed channels drains agricultural lowlands and conveys intermittent flows across the portion of the Project site that connects the proposed Intermodal Complex with CP's Winchester Subdivision. These flows are conveyed in a northeasterly direction to the Quinchien River. An unnamed tributary to the Quinchien River also drains a small, central area of the Project site. The Quinchien River is a major receptor of storm water from the City of Vaudreuil-Dorion, the Town of Saint-Lazare and Highway 340 and is a tributary to Lac-des-Deux-Montagnes, located approximately 15 km northeast of the Project site.

b) Hamelin Creek

A series of headwater channels of Hamelin Creek arise in the north and central areas of the Project site and flow in a southerly direction to the St. Lawrence River. Between its headwaters and confluence with the St. Lawrence River, flow is conveyed via low-gradient, channelized reaches through primarily agricultural lands. A tunnel has been constructed under the Soulanges Canal to allow flow in Hamelin Creek to be conveyed and discharged directly to the St. Lawrence River.

c) Saint-Féréol Creek

Saint-Féréol Creek arises as a channelized ditch along Montée Sullivan on the east side of the Project site. The channel drains agricultural lands to the southeast of the Project site conveying them south, then east, to Chamberry Creek. Chamberry Creek is a tributary to the Outaouais River.

3.2.6 Species at Risk

a) Rare Plant Species and Communities

No “at risk” plant communities or specimens were observed during any of the field investigations or site visits, nor are they expected to occur given the previously disturbed (i.e., agricultural and industrial) nature of the Project site. As indicated in Section 3.2.3, there are no “exceptional forest ecosystems”, as recognized and documented by the MNRF, in the area.

b) Wildlife Species “At Risk”

No occurrence of any species at risk designated on Schedule 1 of the *Species at Risk Act* (“SARA”) has been documented within twenty (20) kilometres of the Project site. Three provincially designated species - the Western chorus frog (*Pseudacris triseriata*), the Wood turtle (*Clemmys insculpta*) and the Pickerel frog (*Rana palustris*) - have been documented in the RCM of Vaudreuil-Soulanges, although individuals or their habitats have not been identified on the Project site during on site inventories.

3.3 Land Use

3.3.1 Past and Current Land Use

As previously described, the majority of the Project site has been used for agricultural production and industrial/commercial purposes for many decades. Current zoning of the Project site includes commercial/industrial and agricultural lands. Other small areas are used for public utilities, including natural gas pipelines, power lines and the CP and CN rail corridors. (Refer to **Appendix 13** for map of Project Area Infrastructure.)

The former Soulanges Industries property, which covers an area of 172 hectares of the Project site footprint, has been used for industrial purposes for over 60 years. In the 1940s, the site was used by the Canadian Armed Forces as a military ammunitions depot. Soulanges Industries subsequently purchased the site and, since 1966, used it for railway and warehousing activities. Although CP purchased the site in October, 2006, CP currently leases the site to Soulanges Railcar Services Inc. and the lessee continues to carry on the same railcar storage, loading and unloading activities. It should be noted that the CPTAQ, in its decision regarding the acquisition by CP (Decision #34184, February 24, 2006) concluded the former Soulanges Industries site is not appropriate for agricultural purposes. The remaining 141 hectares of the Project site are currently designated as agricultural lands in accordance with the ALP Act (details provided in Sections 1.4.2.).

The RCM of Vaudreuil-Soulanges recently adopted a by-law amending the Development Plan to provide for industrial uses incorporating the uses of an intermodal complex for the Project site.

The remaining 141 acres are lands used for a variety of agricultural purposes, including a commercial tree nursery, field crops (corn, organic sunflowers, soya) and raising cattle. The only existing building is a sugar shack.

3.2.7 Potential Contamination from Past Land Uses

Past land uses and industrial activities at the former Soulanges Industries property resulted in the contamination of soils on this portion of the Project site. All contaminated soils, however, have been removed from the affected property by the previous owner (refer to Section 2.3.2). The site assessment, remediation plan and final report on soil contamination at the Soulanges Industries property have been approved by the Ministère du Développement durable, de l’Environnement et des Parcs, and remediation work was completed in compliance with Provincial generic criteria.

The current lessee is not permitted to handle or store any dangerous goods on the property in order to ensure its activities will not contaminate the site. The lessee will also be responsible for removing and properly disposing of the last remaining building (office building) on the site and its foundation in an approved landfill facility.

Outside of the former Soulanges Industries site, CP is not aware of any documented areas of contamination within the Project site. Although agriculture-related products such as pesticides, herbicides and/or fertilizers may be present due to agricultural production, it should be noted that the agricultural lands include organic farming which avoids the use of such products.

3.2.8 Proximity to First Nations Reserves and Traditional Use Areas

There are no First Nations reserves within or near CP's proposed Project site that will be affected. Two First Nation territories are located in the regional vicinity of the Project site, as follows:

- 1) The Kahnawake Mohawk Territory/Reserve is located on the south shore of the St. Lawrence River approximately 40 kilometres east of the Project site. The reserve is approximately 48 square kilometres in area and has a resident population of approximately 7,100. A significant number of Kahnawake members live off the reserve territory.
- 2) The Kahnésatake Mohawk Territory/Reserve is located on the north shore of the Outaouais River approximately 20 kilometres north-west of the Project site. This territory covers an area of approximately 11 square kilometres and has a registered population of approximately 2000.

The federal Department of Indian and Northern Affairs Canada (“INAC”) has been consulted to document any native land claim issues for the area. A response from INAC is outstanding.

CP is not aware of any plant species on the Project site that are used by First Nations for ceremonial or traditional uses. The vegetation on the Project site is limited to common native species of ground cover (i.e., grass, clover), field crops, a commercial tree nursery and fragmented maple groves.

3.2.9 Proximity to Environmental or Cultural Sites

The RCM of Vaudreuil-Soulanges has identified and designated Valued Natural Sites and Valued Heritage, Archaeological and Cultural Sites within their jurisdictional boundaries. None of these sites have been identified within or adjacent to the Project site. The closest environmental or cultural sites to the Project site are Chemin Saint-Féréol and Chemin Saint-Dominique which are designated as heritage lanes. Several heritage nodes have also been identified to the north and east of the Project site and cultural properties situated south of the Canal de Soulanges.

Environmental and cultural features in the vicinity of the Project site are shown on the map in **Appendix 14**.

3.2.10 Proximity to Residential and Other Urban Areas

The regional area of the Project site is rural in character. The residential areas of Saint-Lazare and Les Cèdres are located approximately two (2) kilometres to the north and three (3) kilometres to the south of the Project site, respectively. The municipality of Les Cèdres has a population of approximately 5,500. The much larger City of Vaudreuil-Dorion is situated approximately ten (10) kilometres to the east of the Project site and has a population of approximately 23,300.

There are no residential dwellings within the proposed Project site. Two residential areas are located adjacent to the site: one is a cluster of single unit dwellings located on Montée Chénier, west of the Project site; the second includes single unit dwellings and mobile homes located immediately north of CP's Winchester Subdivision on Route De La Cité-Des-Jeunes. The estimated distance of the closest residential property is 600 metres from the Project site boundary. Individual residential properties are also located at a distance of at least one (1) kilometre, on Chemin Saint-Féréol and Chemin Saint-Dominique, to the east and west of the Project site, respectively. (See aerial photo in **Appendix 15** for distance references.)

4.0 ADDITIONAL REQUIREMENTS RELATED TO FISH, FISH HABITAT AND NAVIGABLE WATERS

4.1 Environmental Features

4.1.1 Aquatic Description

The aquatic features of the Project site consist primarily of a network of drainage channels and constructed ditches as described in Section 3.2.5. The drainage channels/watercourses have been previously altered by existing or past land uses.

4.1.2 Fish Habitat

Based on field investigations to-date, on site reaches of both Wallot Creek and Hamelin Creek directly provide fish habitat or indirectly support fish habitat located downstream of the Project site. The quality of on site fish habitat, however, is significantly reduced by existing land uses of the local and regional area (i.e., industrial, agriculture, urban development) which has negatively affected both physical attributes of the habitat and water quality. Although information on fish use is not available for these creeks, it can be assumed that wetted reaches are usable, at least intermittently, by warm water species such as minnows (*Cyprinidae sp.*), catfish (*Ictaluridae sp.*) and suckers (*Catostomidae sp.*).

In the area of Vaudreuil-Soulanges, the St. Lawrence River supports almost 70 species of fish (Armellin et Mousseau, 1998), the majority of which are warm water species. The small area of the St. Lawrence River potentially affected by the Project (drinking water

intake and treated water discharge) is considered to be fish habitat for some of these species.

As a result of the potential impacts of site development, CP anticipates that approval will be required under the federal *Fisheries Act*. As part of the approval process with Fisheries and Oceans Canada, it is possible that a fish habitat compensation agreement will be required to ensure that the Project will achieve “no net loss” of productive fish habitat.

4.1.3 Photos of the Site

Appendix 15 contains photos of the Project area including the environmental features of the Project site.

4.2 Use of Waterways

4.1.4 Existing Use of Waterways

There are no navigable waterways as designated under the federal *Navigable Waters Protection Act* within the Project site. The St. Lawrence River is an important navigable waterway for both commercial and recreational vessels and represents the only navigable waterway potentially impacted by the Project, resulting from the construction of water intake and treated water discharge infrastructure. Commercial navigation is largely limited to the Beauharnois Canal located south of Valleyfield Island on the St. Lawrence, while recreational navigation is widespread throughout the St. Lawrence mainstem and channels. Given that proposed Project activities will be restricted to the riverbank of the St. Lawrence River, approval under the *Navigable Rivers Protection Act* is not expected.

4.1.5 Fisheries in the Area

On site watercourses do not support commercial or Aboriginal/subsistence fisheries. Commercial fishing was historically prevalent in the St. Lawrence, however, the fishery is currently limited to the capture of only bait-fish. There are no documented subsistence fisheries on the St. Lawrence River within a radius of 25 kilometres of the Project site. Recreational fishing is ubiquitous throughout the St. Lawrence River.

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