Confederation Line
West LRT Extension
Maintenance and Storage Facility
Planning and EA Study

Community Information Session
September 21, 2015

Presentation Overview

- Introduction and Meeting Purpose
- Background
  - Stage 2 LRT expansion
  - Need for additional maintenance and storage capacity
  - Facility components
  - Site selection
  - Community impacts and mitigation
- Overview of conceptual design
- Next Steps

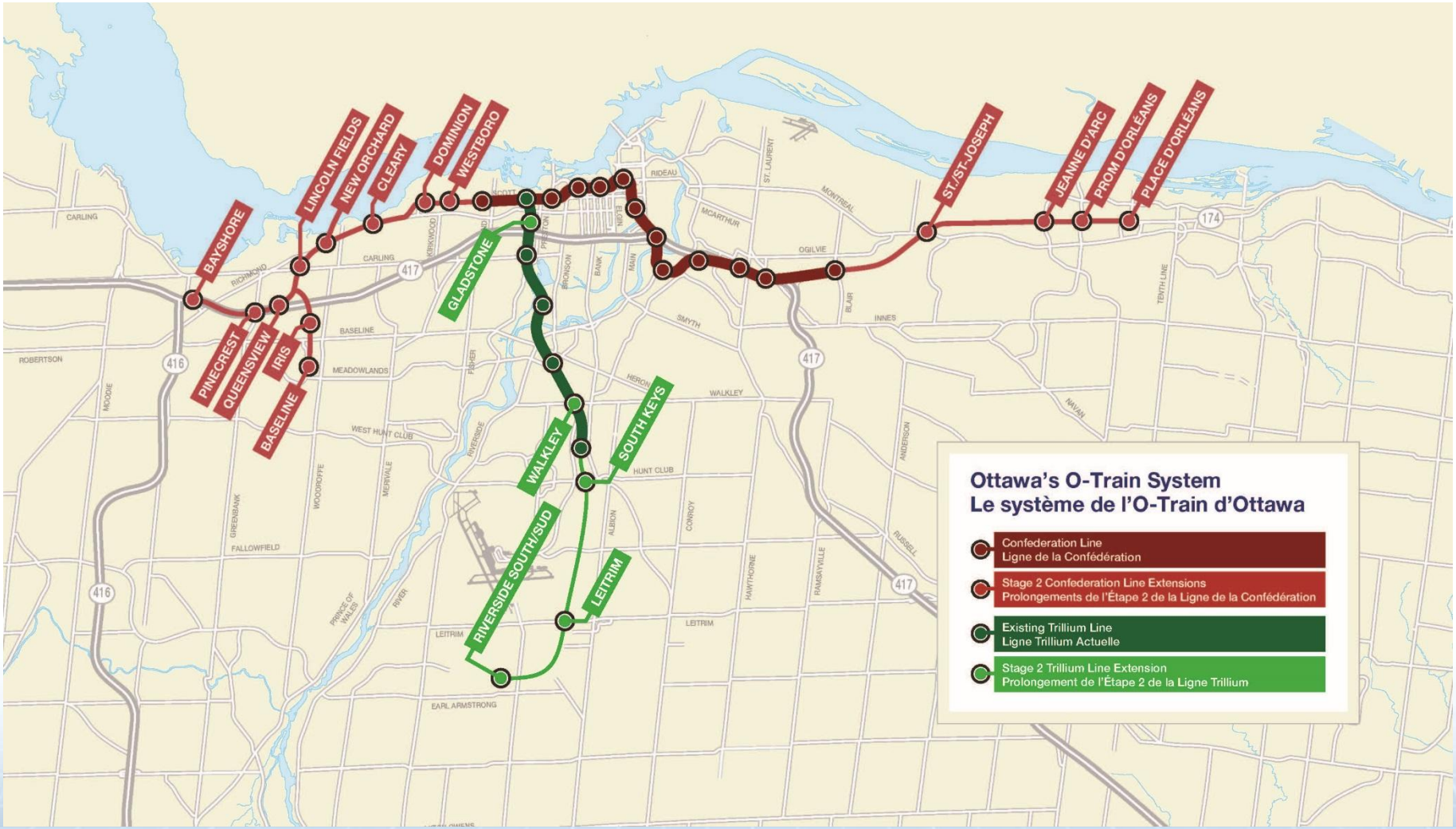
Meeting Purpose

- Provide background on the need for additional capacity for the maintenance and storage of light rail vehicles to support the City's Stage 2 LRT project
- Overview of potential sites explored and evaluated for this additional capacity
- Illustrate potential design concepts to minimize community impacts of a potential MSF facility at the Woodroffe site and connection to the LRT network
- Summarize the process, variables with respect to timing, size and function, and next steps

We want to hear from you.

Please speak to a study team member, fill out a comment form or submit comments to stage2@ottawa.ca by October 9, 2015.

Stage 2 LRT


BAYSHORE
LINCOLN FIELDS
NEW ORCHARD
CLEARY
DOMINION
WESTBORO
GLADSTONE
PINECREST
QUEENSVIEW
IRIS
BASELINE
WALKLEY
SOUTH KEYS
RIVERSIDE SOUTH/SUD
LEITRIM
ST./ST-JOSEPH
JEANNE D'ARC
PROM D'ORLÉANS
PLACE D'ORLÉANS
Ottawa's O-Train System
Le système de l'O-Train d'Ottawa
Confederation Line
Ligne de la Confédération
Stage 2 Confederation Line Extensions
Prolongements de l'Étape 2 de la Ligne de la Confédération
Existing Trillium Line
Ligne Trillium Actuelle
Stage 2 Trillium Line Extension
Prolongement de l'Étape 2 de la Ligne Trillium

Background

- A Maintenance and Storage Facility (MSF) is **essential for the operation and safe running** of any LRT system
- Light Rail Vehicles (LRVs) **require regular and routine maintenance** to ensure reliability of service, safety of operation, upkeep of warranty and day-to-day cleaning
- The MSF also **acts as a holding area** in which LRVs can be stored when not needed for operation, such as during off-peak or overnight hours
- When the Confederation Line opens in 2018, all vehicle storage and maintenance will be performed at the Belfast MSF which is currently under construction; **as the O-Train system expands an additional facility will be required to meet the City's ultimate needs**

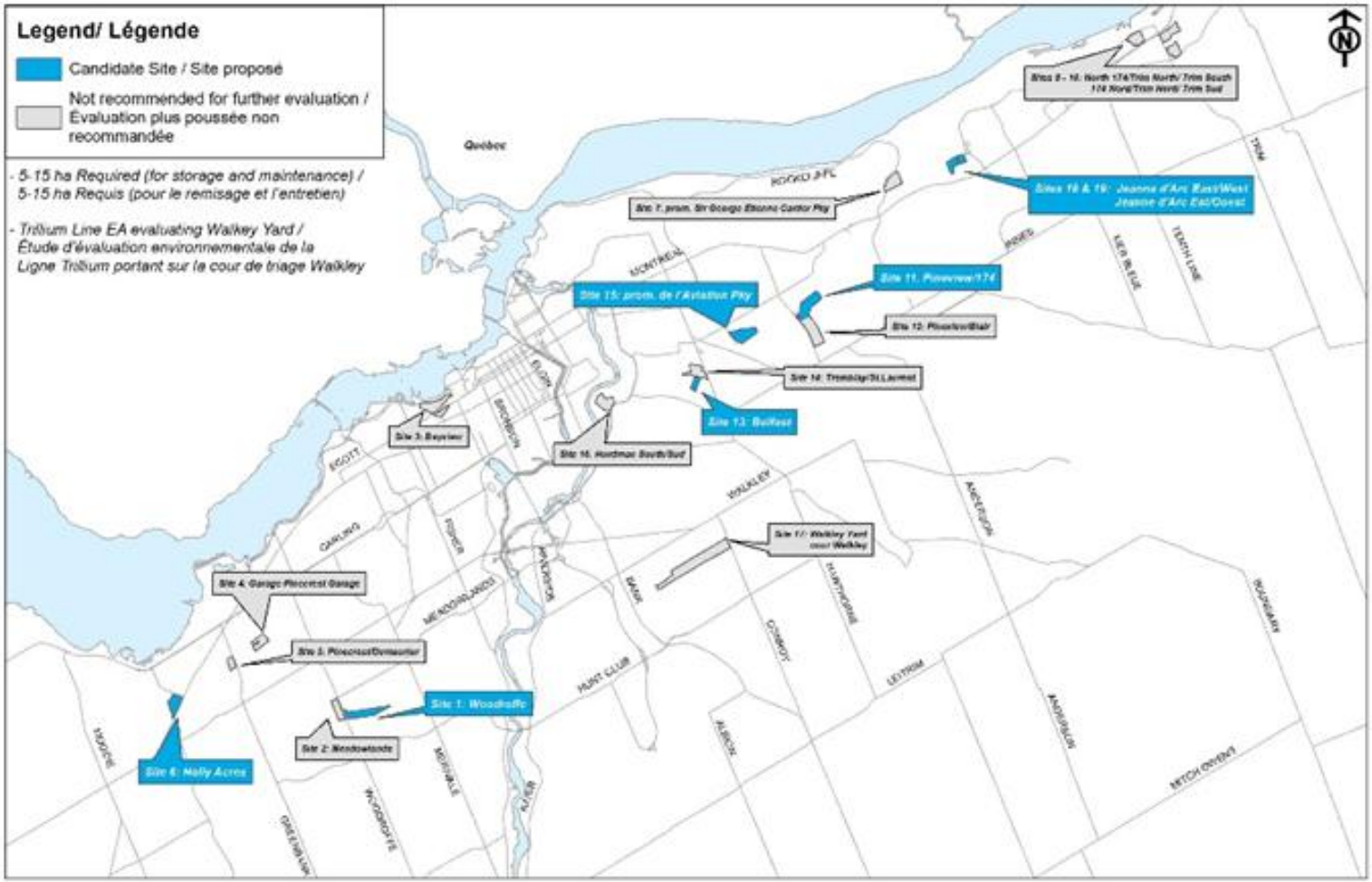
Need for additional MSF Capacity

- Belfast MSF has the capacity to service the initial fleet requirement, accommodate early expansion, and provide heavy maintenance
- As part of Stage 2 LRT network planning, a requirement for additional light rail maintenance and storage capacity has been identified to accommodate the ultimate LRT fleet
- Fleet requirements for the LRT network will continue to be reviewed and updated to take into account phased opening and expansion of service in 2023, 2031 and beyond
- By 2031, there will likely be a requirement for additional light rail maintenance and/or storage capacity to service increased ridership at either an expanded Belfast MSF or the Woodroffe site, or both
- Any new MSF facility at this site will likely be constructed in phases over a number of years

MSF Components

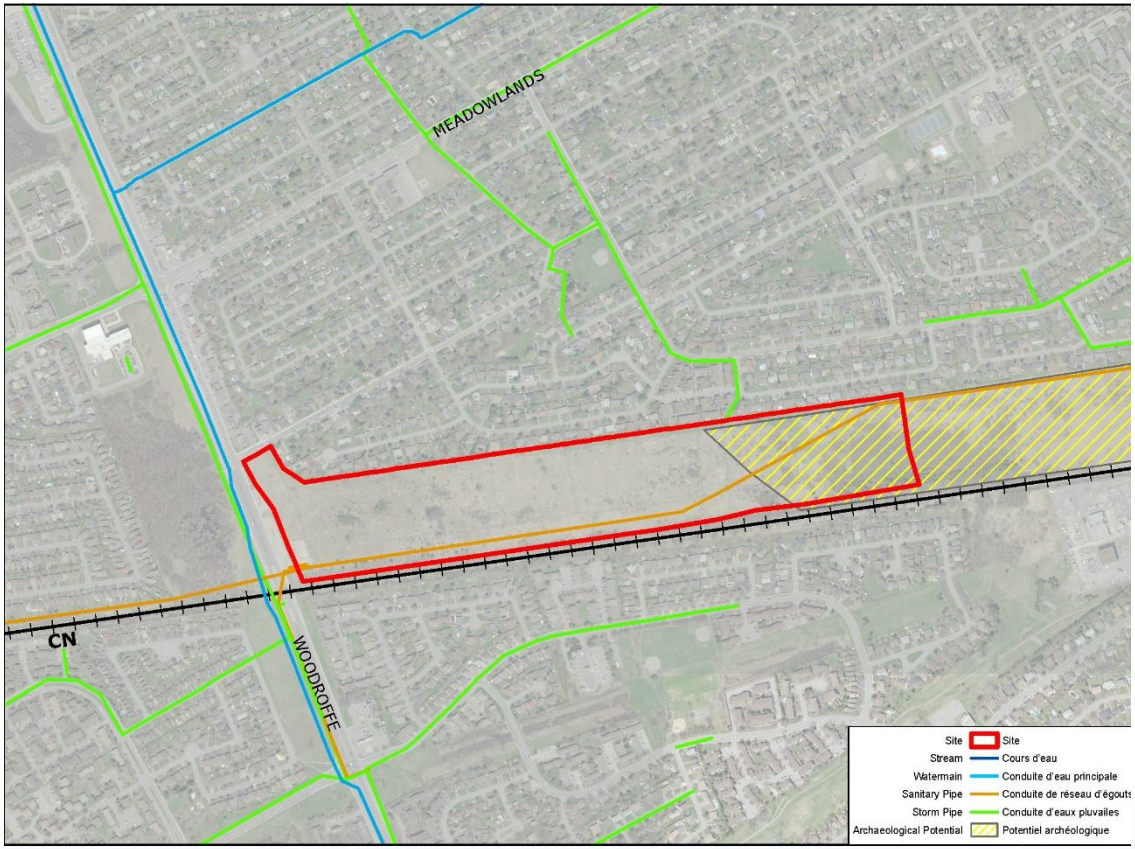
- The MSF needs to accommodate the following major components:
  - Light Repair Area: For daily wear and tear repairs
  - Workshops: Smaller workshops isolated from other maintenance activities
  - Storage Yard: Tracks for storage of LRVs when not in use
  - Maintenance-of-Way Area: Space for storage of maintenance materials
  - Offices and staff/visitor parking area

MSF Site Selection

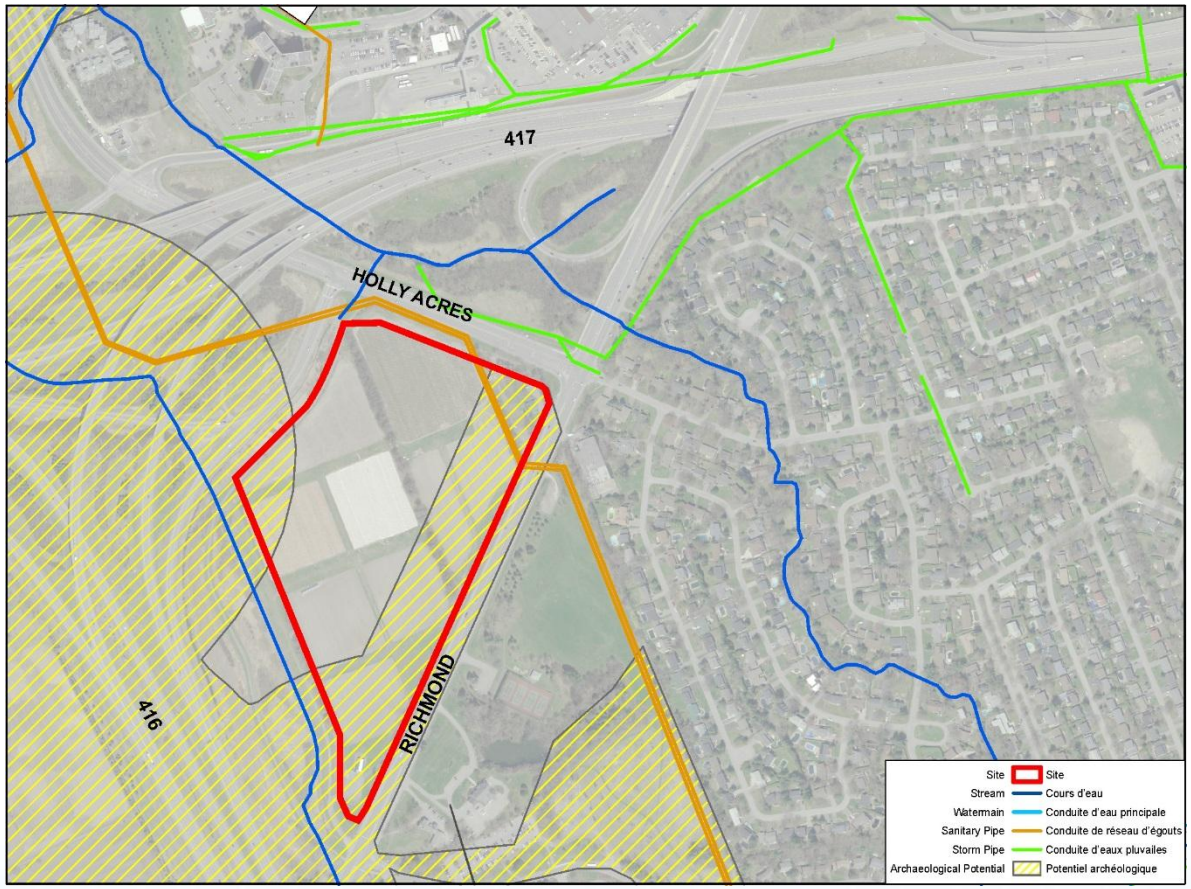


MSF Site Selection

- Each candidate site was reviewed through basic screening criteria:
  - Adequate size and configuration
  - No major environmental site issues
  - Reasonable costs to connect to the system
  - Compatibility with long term lane use plans
- Additional evaluation was undertaken for the top six sites, focused on four main categories:
  - Site Characteristics
  - Facility Operations
  - System Operations
  - Costs


MEADOWLANDS
CN
WOODROFFE
Site
Stream
Watermain
Sanitary Pipe
Storm Pipe
Archaeological Potential
Site
Cours d'eau
Conduite d'eau principale
Conduite de réseau d'égouts
Conduite d'eaux pluvailes
Potentiel archéologique

Woodroffe


417
HOLLY ACRES
RICHMOND
416
Site
Site
Stream
Cours d'eau
Watermain
Conduite d'eau principale
Sanitary Pipe
Conduite de réseau d'égouts
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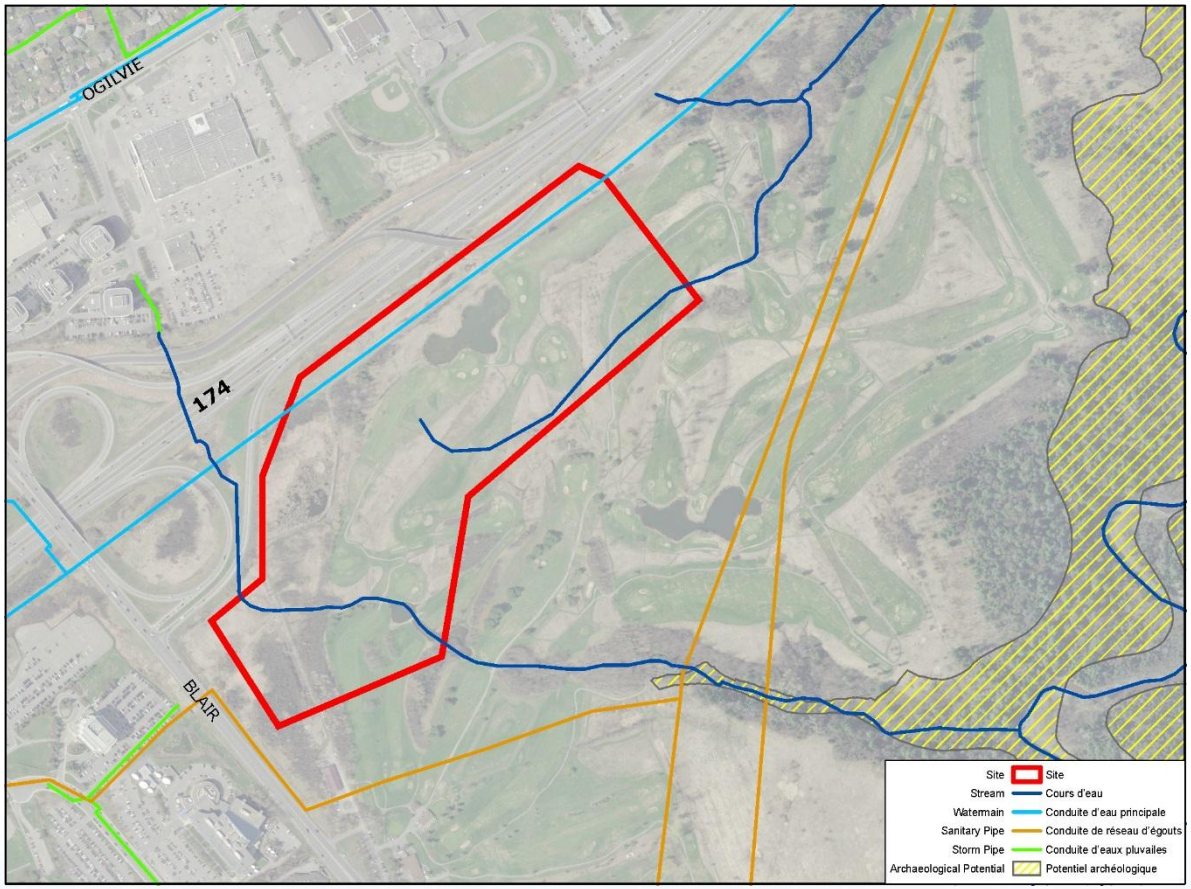
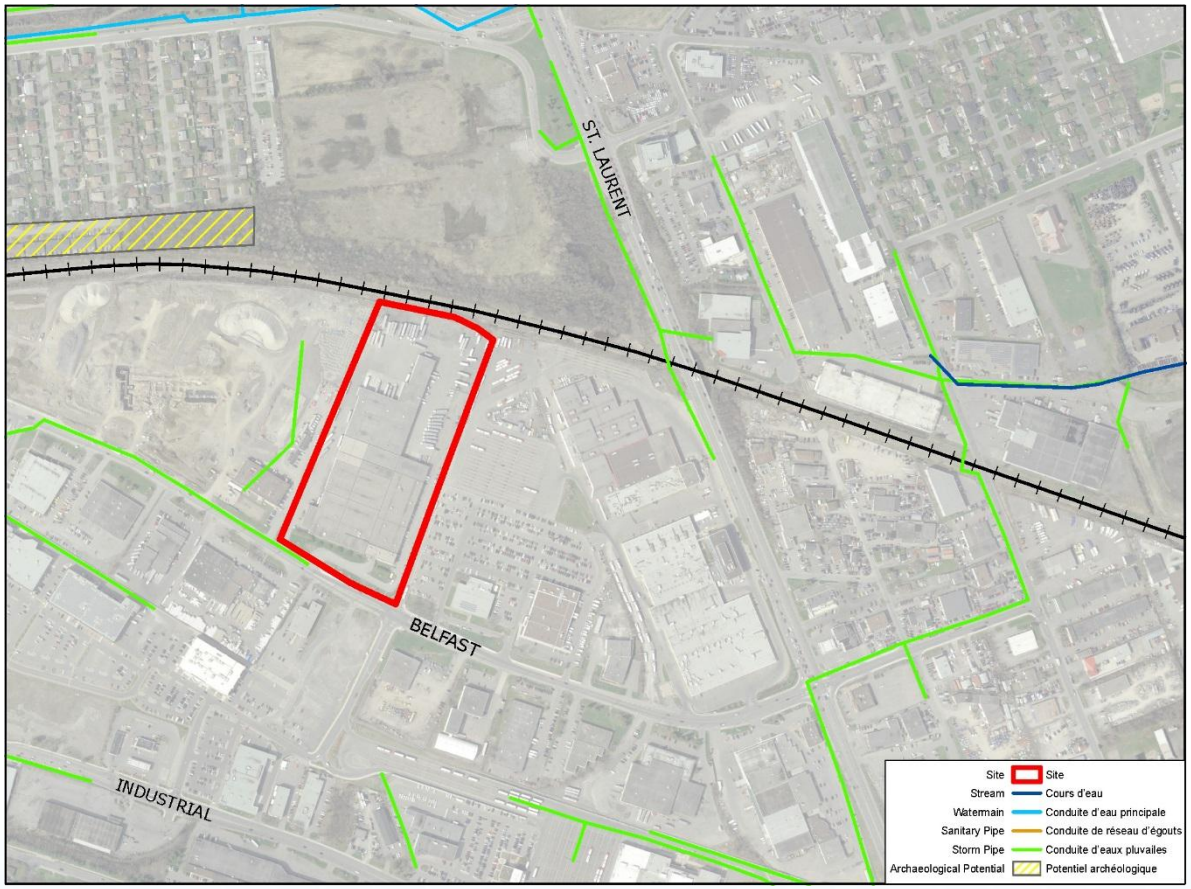
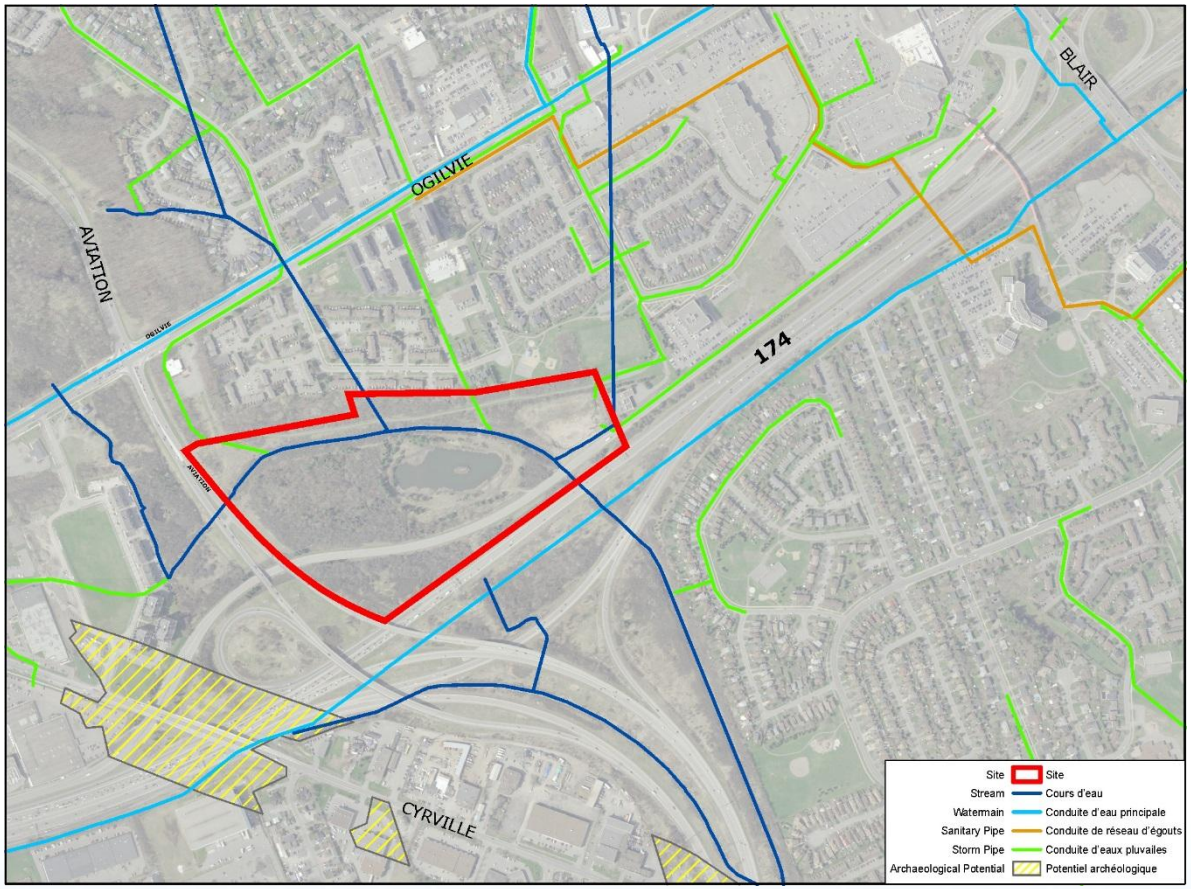
Holly Acres



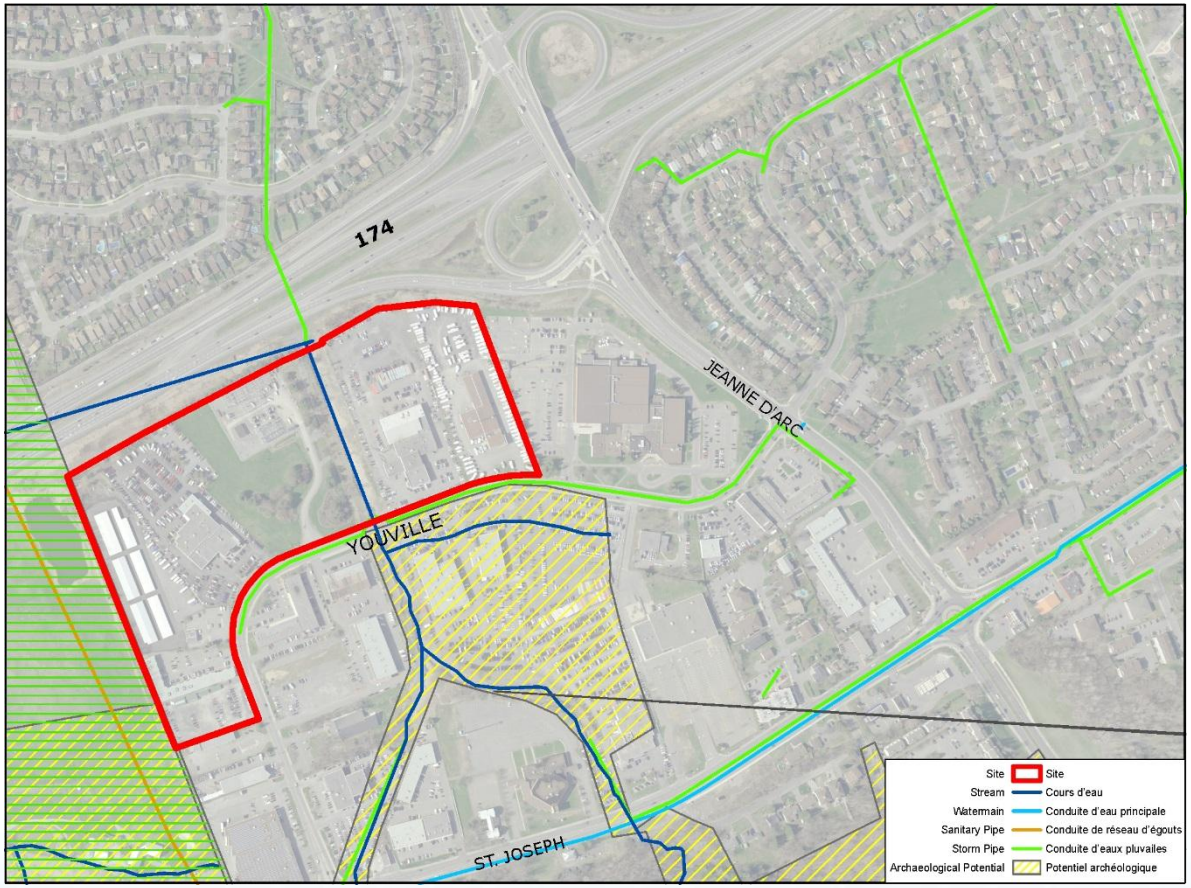
Pineview Golf Course



Belfast Expansion



Aviation Parkway


174
JEANNE D'ARC
YOUVILLE
ST. JOSEPH
Site
Site
Stream
Cours d'eau
Watermain
Conduite d'eau principale
Sanitary Pipe
Conduite de réseau d'égouts
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Jeanne d'Arc

MSF Site Selection

	Woodroffe	Holly Acres	Pineview	Belfast	Aviation Parkway	Jeanne d'Arc
Site Characteristics	15	12	8	14	9	11
Facility Operations	10	12	10	10	9	9
System Operations	7	2	4	8	6	2
Cost	7	3	6	5	5	5
Total	**39**	**29**	**28**	**37**	**29**	**27**

- Woodroffe and an expanded Belfast site, either on their own or in combination, were best suited to meet the ultimate requirements.

Why This Site?

Location:

- Within relative close proximity to the rail line as well as municipal services, utilities and power
- Its westerly location balances operational needs with Belfast Yards in the east, providing for quicker system start-up each morning, and wind-down at day's end
- Will enable more light rail vehicles to be serviced more quickly
- Potential to re-use the CN Rail bridge overpass to access the site

Size:

- Is of adequate size and configuration to help accommodate the City's ultimate LRT network requirements

Conceptual Design Overview

Why This Site?

Environmental:

- No major environmental issues with site
- More than half of the open space between Woodroffe Ave. and Merivale Rd. will remain untouched by what has been identified as the maximum potential footprint of this project
- Site is large enough to properly contain all stormwater; no threat of off-site drainage/seepage
- Continuity of future city-wide pathway connections can be maintained

Proposed Mitigation

- A vegetated berm (with trees) to provide a visual and sound buffer and to separate the site from residential properties; opportunities for advanced plantings
- A noise wall all around the site for additional noise mitigation, including at the high point of the berm along the north edge
- A multi-use pathway system built to provide formal east-west connectivity and to connect to local community access points
- Storage and office buildings enclosed to provide weather protection and community buffering
- Light Rail Vehicles will move at low speed, minimizing potential noise and vibration impact
- Site lighting minimized and controlled to reduce light spillage to the adjacent community
- Noise barriers along elevated tracks and bridge to minimize noise

Proposed Mitigation

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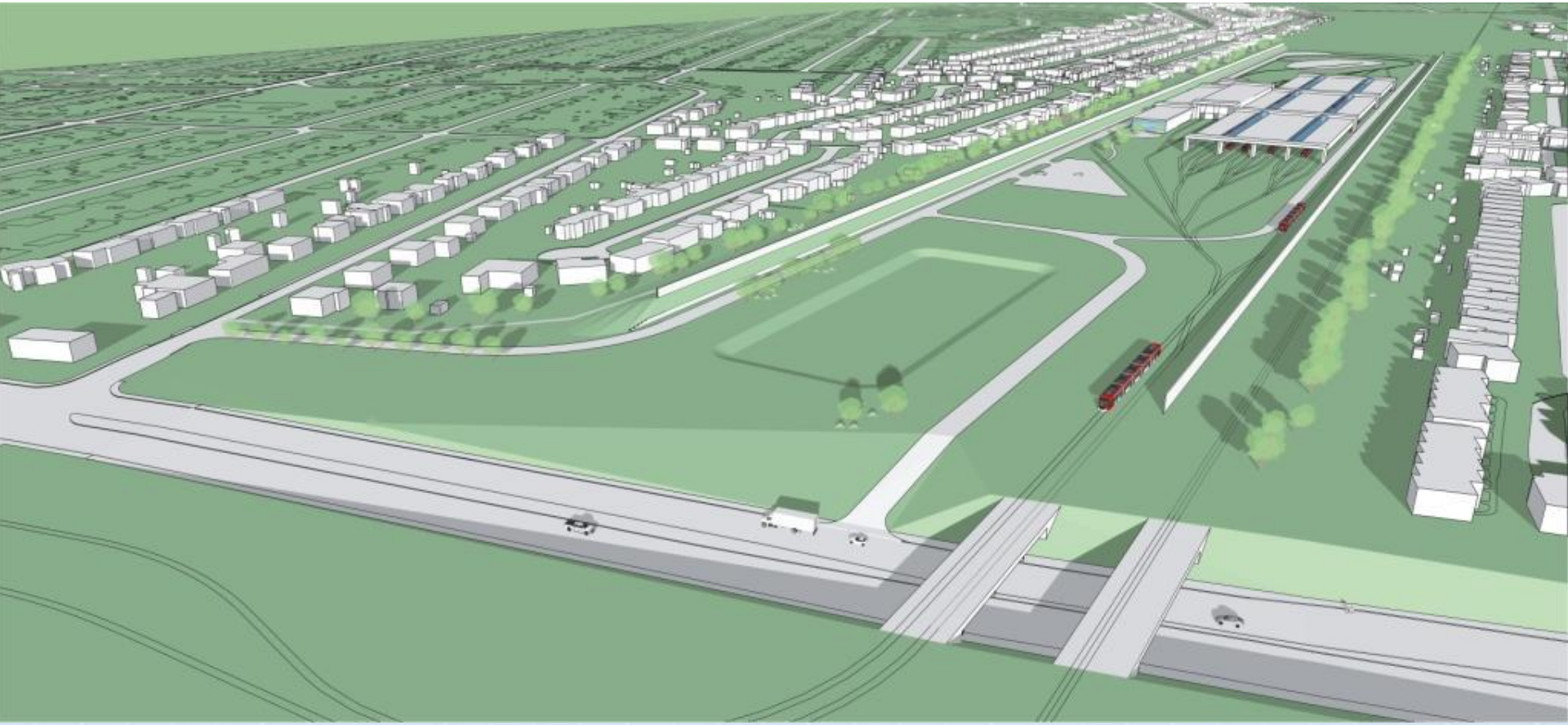

Proposed Mitigation

Proposed Mitigation

MSF Connecting Track

- Extension of LRT corridor south from Baseline Station required to reach the MSF site
- Corridor already protected for rapid transit (Southwest Transitway Extension)
- Two options being protected for connection:
  - Below-grade (trench) alignment, and
  - Elevated alignment
- Both options will protect for a future LRT station where the alignment crosses Tallwood Avenue and allow future extension of LRT south along Woodroffe Avenue towards Barrhaven

MSF Connecting Track

Environmental Assessment

- The concept design presents the largest land footprint required to meet the ultimate expansion of Confederation Line
- The concept design also identifies how pathway continuity, noise, views, and screening from adjacent communities could be accommodated
- As part of the EA process, a full impact assessment will be conducted
- The following potential environmental interactions have been identified:

Project Environmental Interactions

Existing Condition	Consideration
Social Environment	Planning Policies Land use Land ownership Cultural Heritage Resources Air quality, noise, and vibration
Transportation Environment	Existing road network/transit networks Existing pedestrian/cycling networks
Infrastructure and Utilities	Water distribution system Sanitary and combined sewers Storm drainage Structures Hydro
Economic Environment	City budgeting
Natural Environment	Aquatic environment Terrestrial environment Wildlife Species at risk
Physical Environment	Geophysical Conditions Contamination and hazardous materials Well Records

Next Steps

- **Fall 2015 –** Initiate provincial Transit Project Assessment Process
- **Early 2016** – Completion of documentation to fulfil the provincial and federal environmental assessment requirements

Please let us know what you think by completing the Comment-Questionnaire Form and placing it in the designated box before you leave.

All information is also available online at Ottawa/westernLRT.

Questions?

For more information contact:

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