

MSF Site Selection

Thorncliffe Park Community Table

May 27, 2021



Infrastructure
Ontario

Site Selection

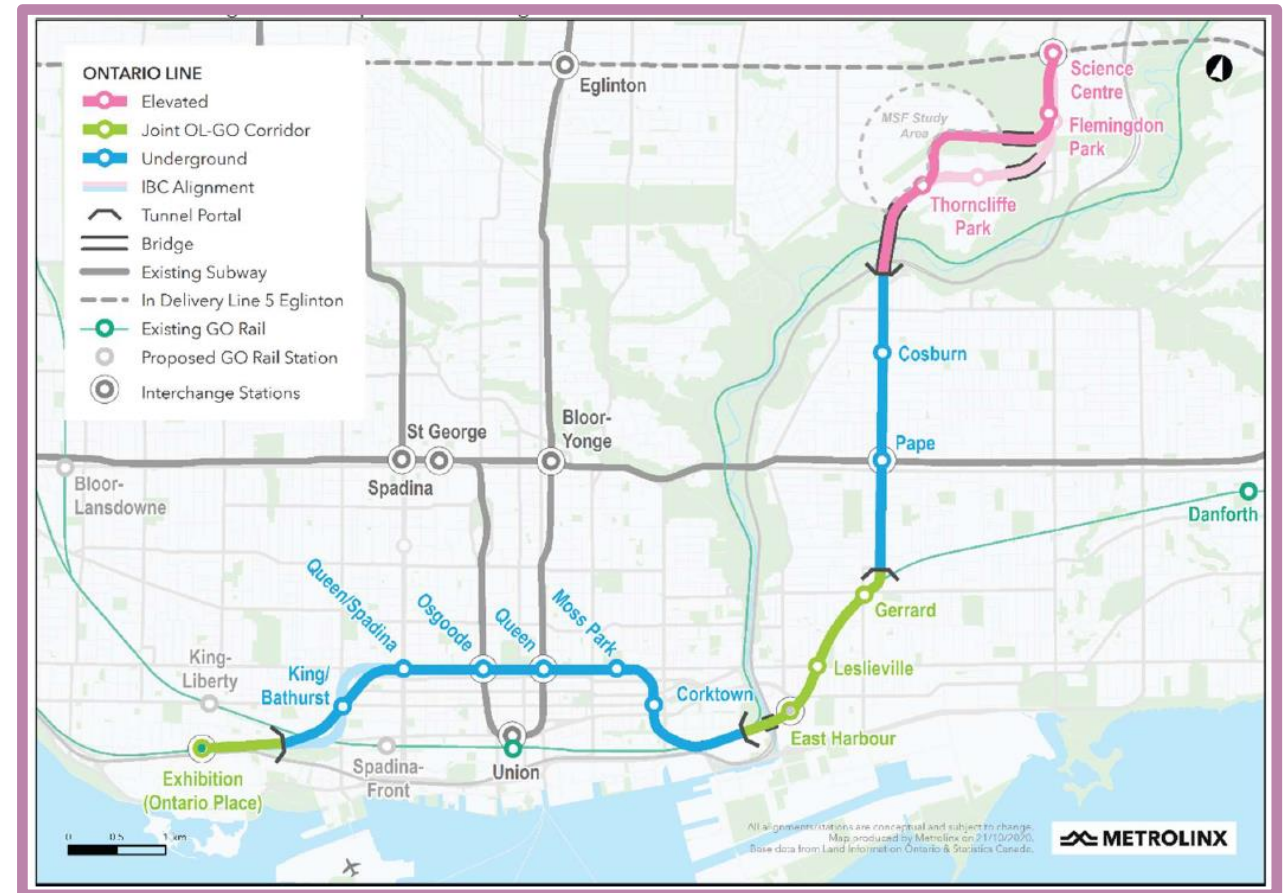
Decision History | Summary

July 2019	<ul style="list-style-type: none"> Identify 'representative MSF site location' to assess potential cost, impacts, deliverability, and operations.*
August 2019 to February 2020	<ul style="list-style-type: none"> Site selection process: long list of sites (9 sites) ➡ shortlist of sites (2 sites) ➡ preferred site Evaluate alternative Thorncliffe alignments in parallel
February 2020	<ul style="list-style-type: none"> Evaluation confirms decision to place the MSF at Wicksteed and Beth Neilson (Site 1) Alignment shifted north to follow the hydro corridor; Thorncliffe Station moved to west leg of Thorncliffe Park Drive and Overlea Blvd
Winter/Spring 2020	<ul style="list-style-type: none"> Advance design for preferred MSF site
Spring/Summer 2020	<ul style="list-style-type: none"> Following consultation with the City and with large employers in the area, Metrolinx/City/Province agreed that job losses would be too severe if Wicksteed site is used. Reached agreement to re-assess former long list of sites with a greater focus on potential impact on existing/planned employment
August 2020	<ul style="list-style-type: none"> Review site selection process for sites on long list, developing cost, and selecting a new shortlist of sites
September 2020	<ul style="list-style-type: none"> Further refine shortlist to options 1 and 2, including hybrids of the two options
Winter 2020/2021	<ul style="list-style-type: none"> Select a hybrid option consisting of sites 1 and 2
April 2021	<ul style="list-style-type: none"> Present MSF location to the public

*Representative site considers the proposed site boundary, immediate surroundings and orientation, site access, proposed development, use and height of buildings, landscape, and site character.

Determining the MSF Study Area

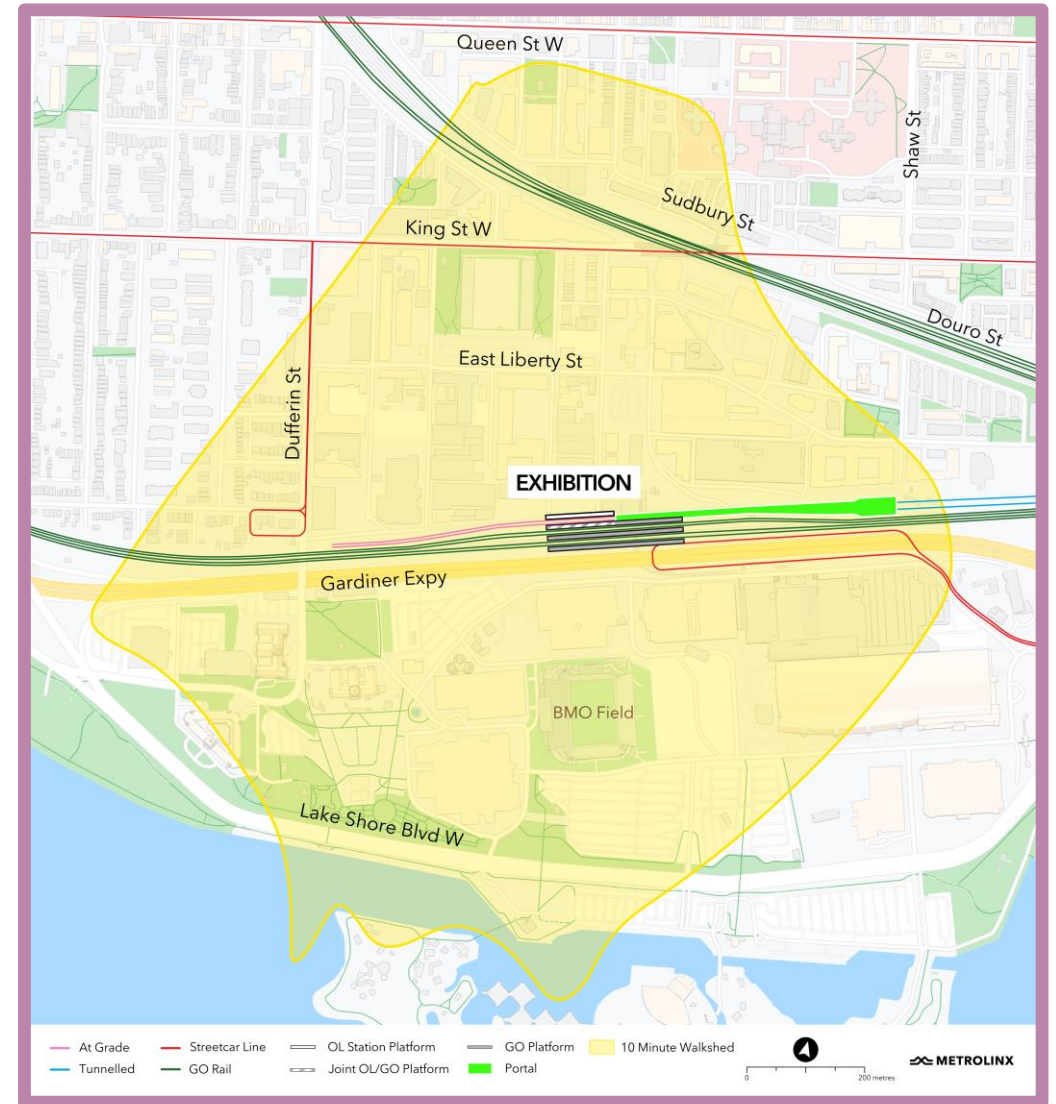
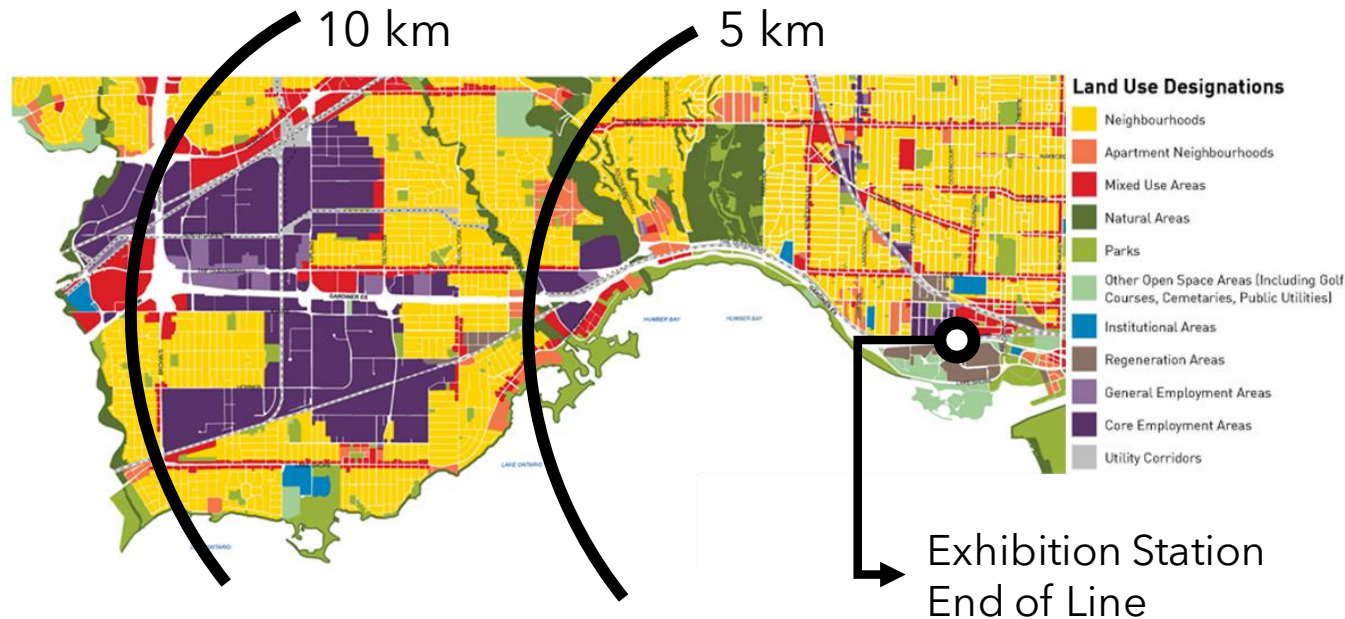
- **Size and shape** – a single site that can accommodate train storage requirements now and into the future
- **Track connection** - constructability, length, and cost of non-revenue access track
- **Land use*** – compatibility with existing and planned land uses (i.e., avoids impacts to planned residential use or large employment centres)
- **Future transit riders** – avoid areas targeted for significant growth
- **Community impacts/benefits**
- **Environmental impacts**
- **Property costs**



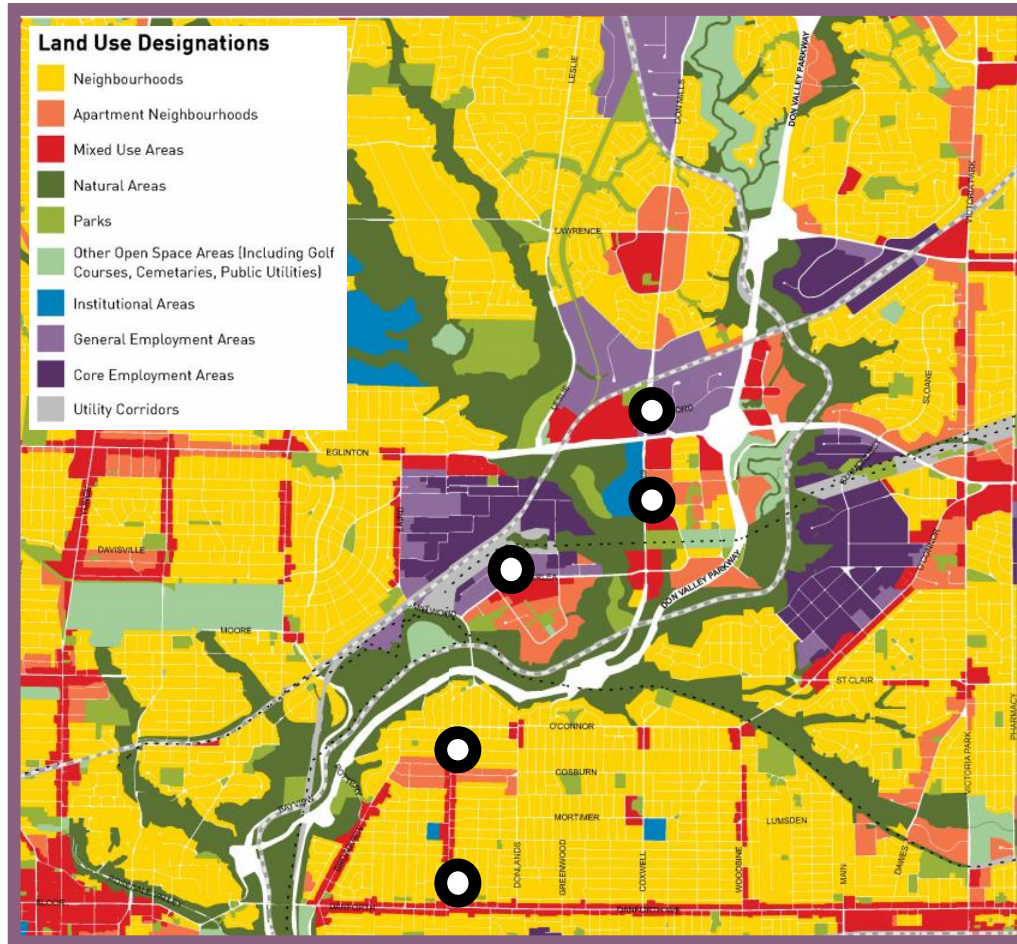
*The Don Mills Crossing Secondary Plan, adopted by City Council in April 2019 - examine ways to focus and shape anticipated growth around the intersection of Don Mills Road and Eglinton Avenue East ; the Laird in Focus Site and Area Specific Policy.

Why not the West End?

- **Exhibition Grounds was not advanced** – Canada's largest event and business destination
- **Nearest suitable site is 5-10 km away, west of the Humber River** – would require a connection track that is an extra 30% to 60% of mainline length; significant costs and construction challenges
- Already densely developed area

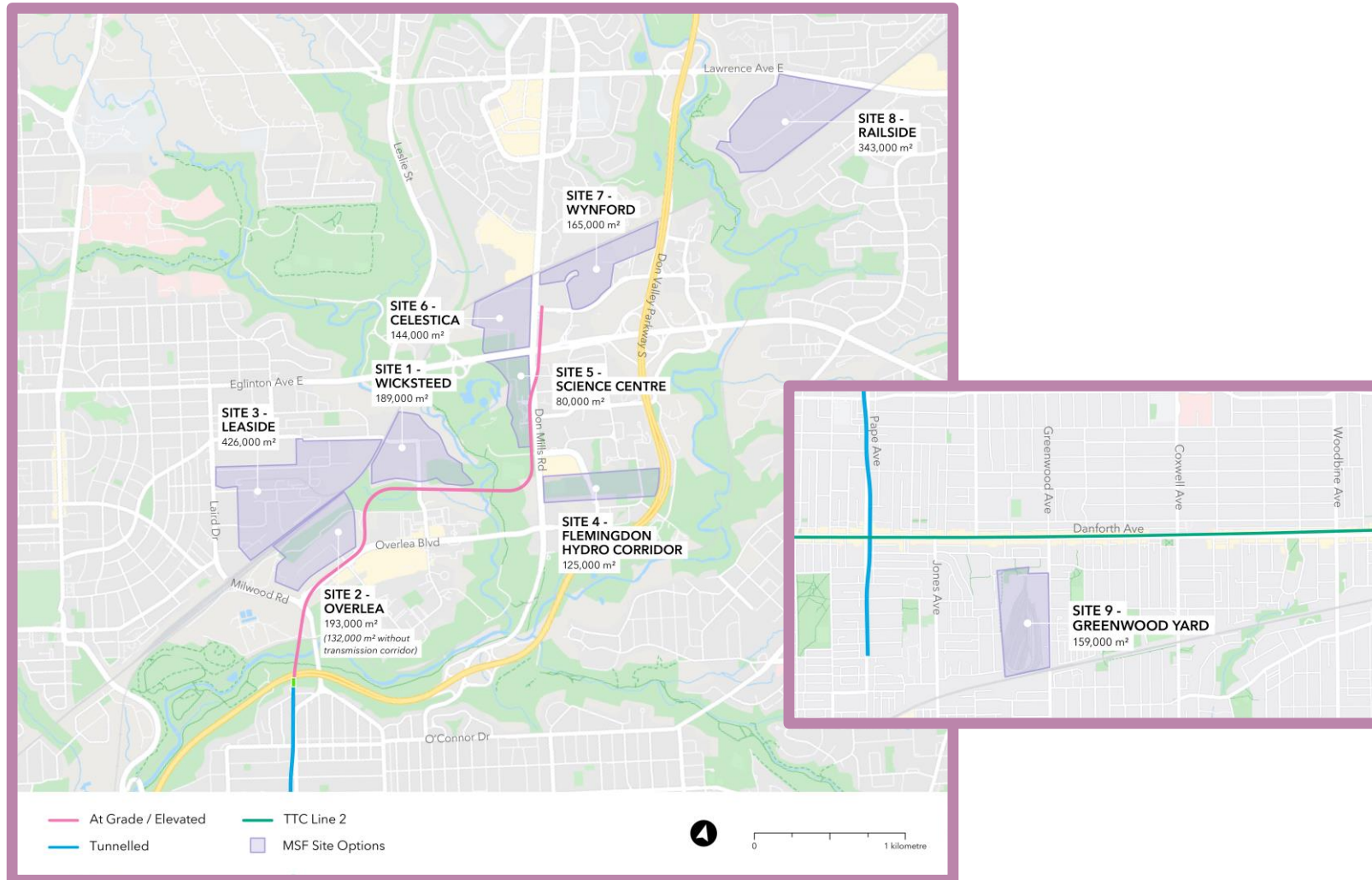


Why the North End?



- Large tracts of land near the mainline zoned for employment and compatible with MSF
- Existing use is low density
- Adjacent large properties that can be easily assembled
- Opportunity to construct connection track on the surface or elevated, reducing costs

Sites assessed for size and nearness to new subway line



Assumptions:

- MSF will require storage capacity for **44 trains** (4 –5 train cars per train) to achieve a 90-second service frequency
- Projection for up to **10 additional trains** for future growth

Option 1 - Wicksteed



Land Use	Industrial / manufacturing
Employment	800 - 900 *

Pros

- Near to Ontario Line alignment - reduces construction, operating and maintenance costs
- Large enough for immediate and future train storage needs
- Site isolated and does not directly impact adjacent neighbourhoods, except for removal of road connection between Thorncliffe and Leaside

Cons

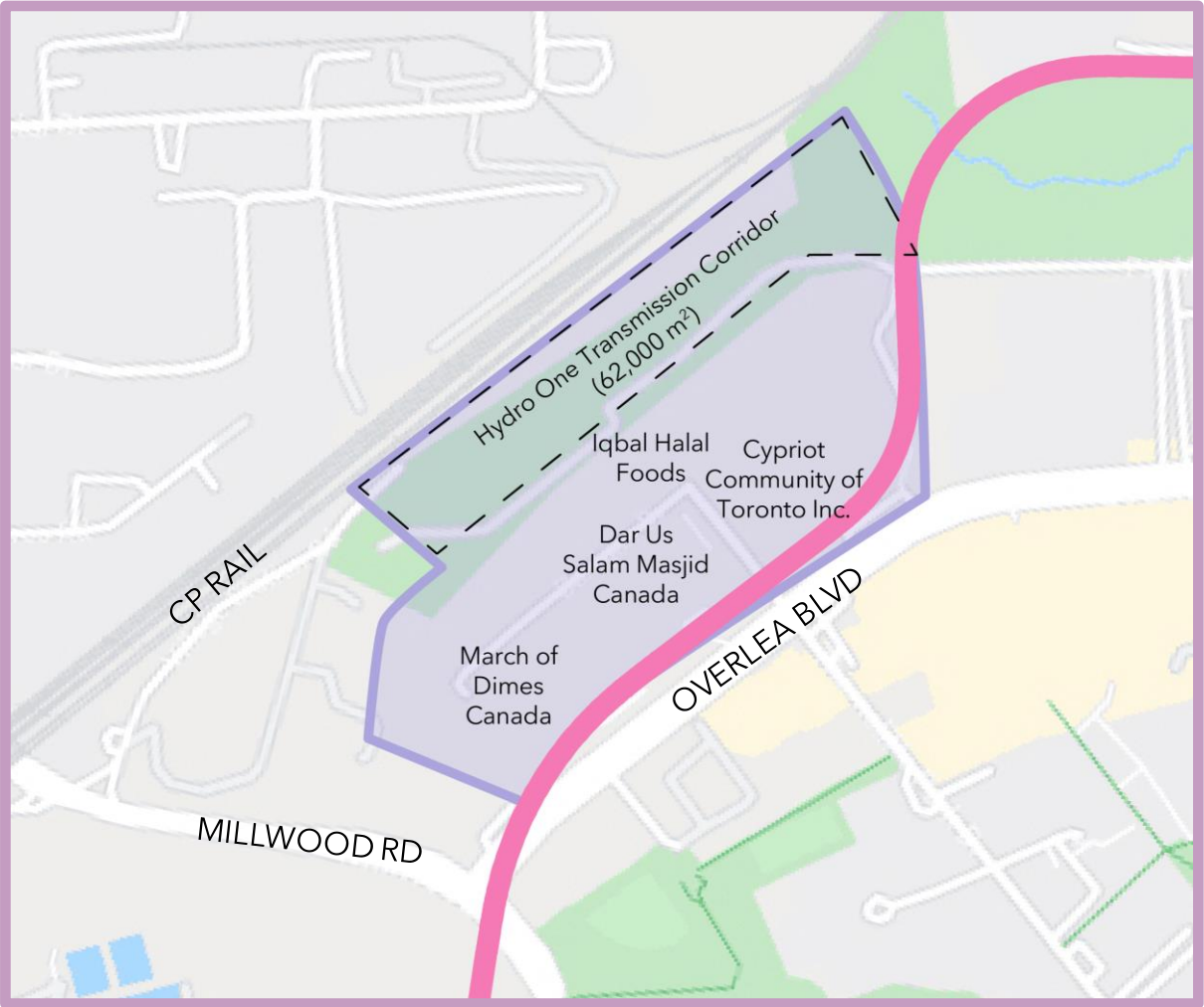
- Impacts several large industrial employers and conflicts with City's goal to establish area as a core employment area as identified in the City's *Official Plan* and *Laird in Focus Site and Area Specific Policy*
- Impact on TRCA environmentally sensitive areas
- Impact to goods movement corridor and rail crossing, as well as active transportation connection, Eglinton traffic

Result

- **Carried forward**

* City of Toronto Employment Survey, 2019

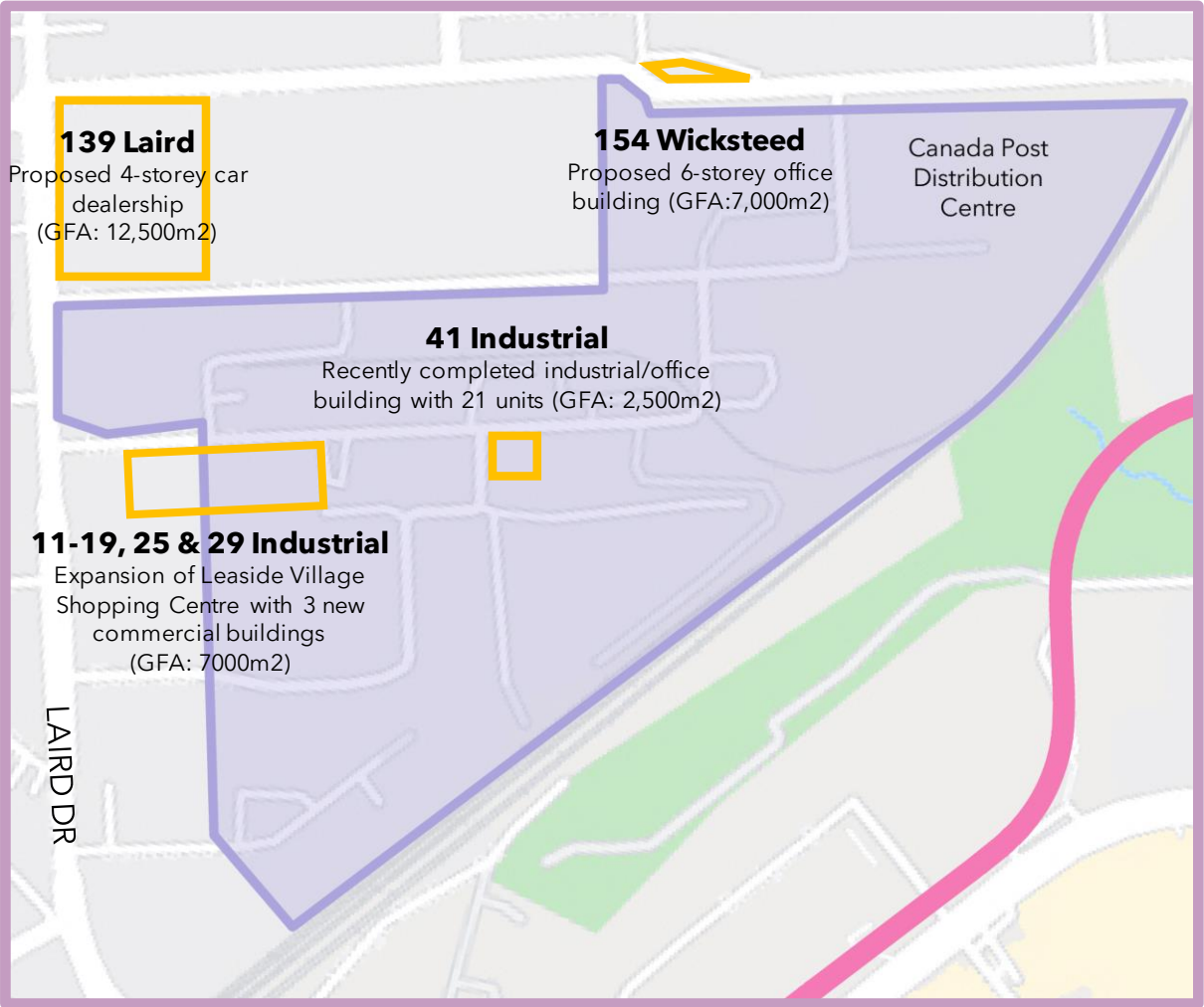
Option 2 - Overlea Blvd.



Land Use	Commercial, light industrial, religious/institutional
Employment	700 - 1100 *
Pros	
<ul style="list-style-type: none">Large enough for immediate and future train storage needsNear to Ontario Line alignment - reduces construction, operating and maintenance costs	
Cons	
<ul style="list-style-type: none">Neighbourhood, commercial, institutional and industrial impactsExpansion opportunities may be limited by restrictions on Hydro Corridor landsMay neutralize north side of Overlea Blvd for future commercial/residential development	
Result	
<ul style="list-style-type: none">Carried forward	

* City of Toronto Employment Survey, 2019

Option 3 - Leaside



Land Use	Commercial, employment, adjacent to residential
Employment	400 - 1,850 *

Pros

- Large enough for immediate and future train storage needs
- Limited impact to adjacent neighbourhoods

Cons

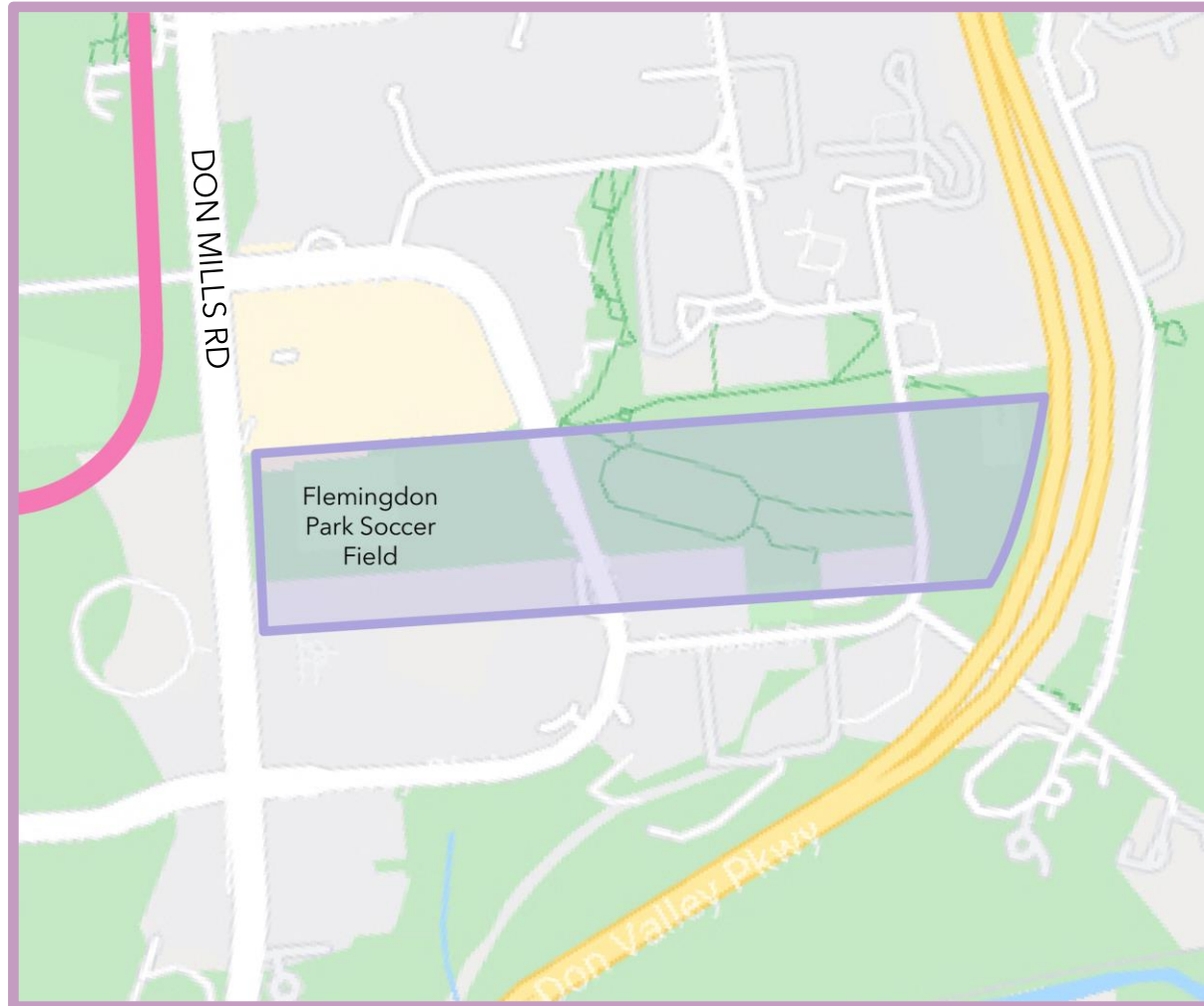
- Displaces existing commercial and employment uses and conflicts with City vision for area (*Laird in Focus*)
- Feasibility challenges crossing the CP rail corridor
- May impact City vision for future multi-use trail crossing
- Irregular shaped parcels may lead to less ideal layout for train operations
- Potential impacts to Canada Post distribution site

Result

- **Carried forward**

* City of Toronto Employment Survey, 2019

Option 4 - Flemington Hydro Corridor



Land Use	Parks / Hydro-One corridor
Employment	0
Pros	
<ul style="list-style-type: none"> Near to Ontario Line alignment - reduces construction, operating and maintenance costs Publicly owned lands 	
Cons	
<ul style="list-style-type: none"> Not large enough Removal of existing greenspace and parkland Significant impacts on Flemington Park community Would require extensive negotiation and potential relocation of Hydro One infrastructure 	
Result	
<ul style="list-style-type: none"> Screened out 	

Option 5 - Science Centre

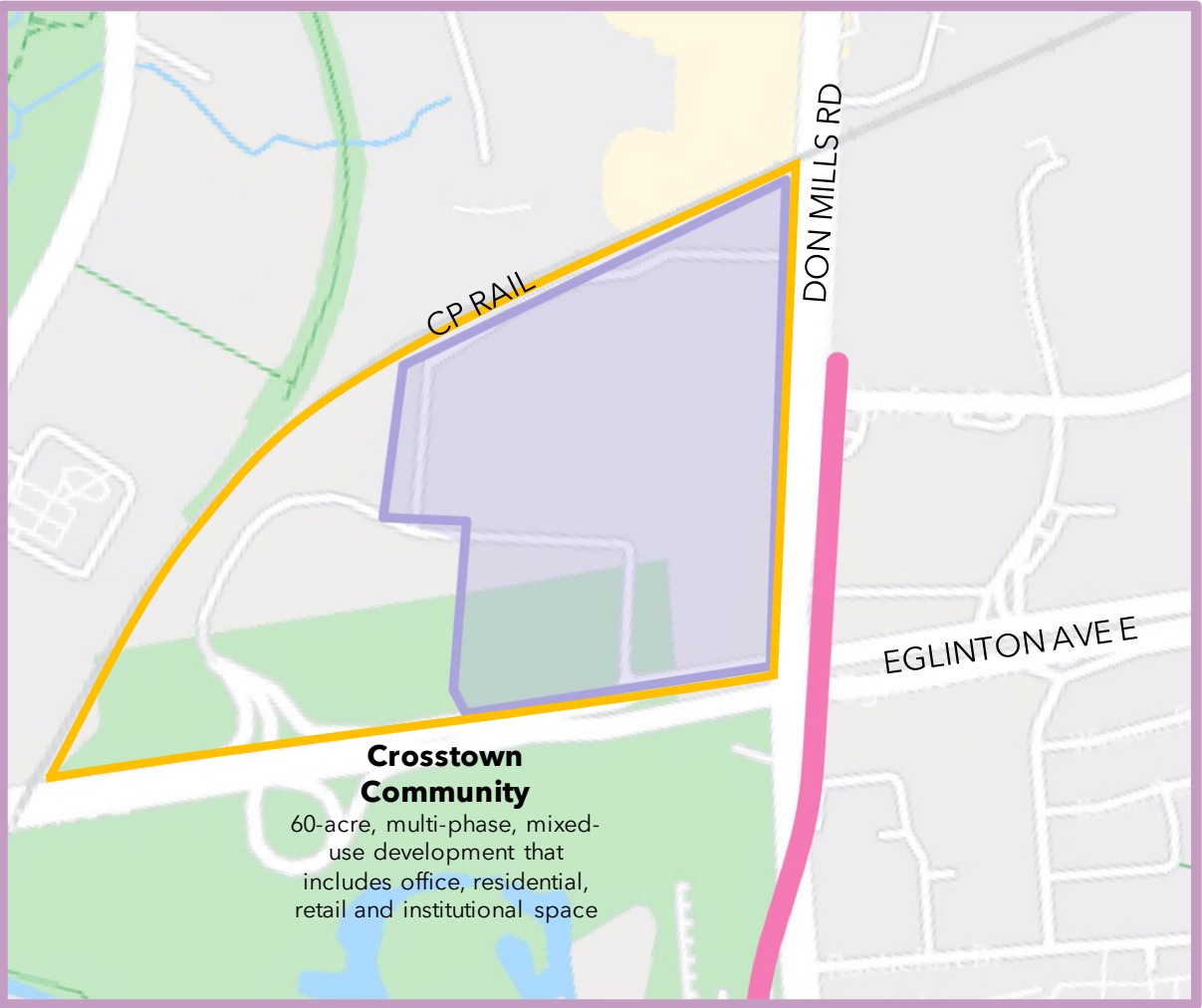


Land Use	Institutional
Employment	350 *
Pros	
<ul style="list-style-type: none">Near to Ontario Line alignment - reduces construction, operating and maintenance costsPublicly owned lands	
Cons	
<ul style="list-style-type: none">Not large enoughImpact to Science CentreImpacts to West Don River valleyMay conflict with plans for affordable housing and school	
Result	
<ul style="list-style-type: none">Screened out	

* City of Toronto Employment Survey, 2019

* Data obtained from City of Toronto Employment Survey, 2019

Option 6 - Celestica



Land Use	Large scale mixed-use development
Employment	n/a (proposed development)

Pros

- Near to Ontario Line alignment - reduces construction, operating and maintenance costs

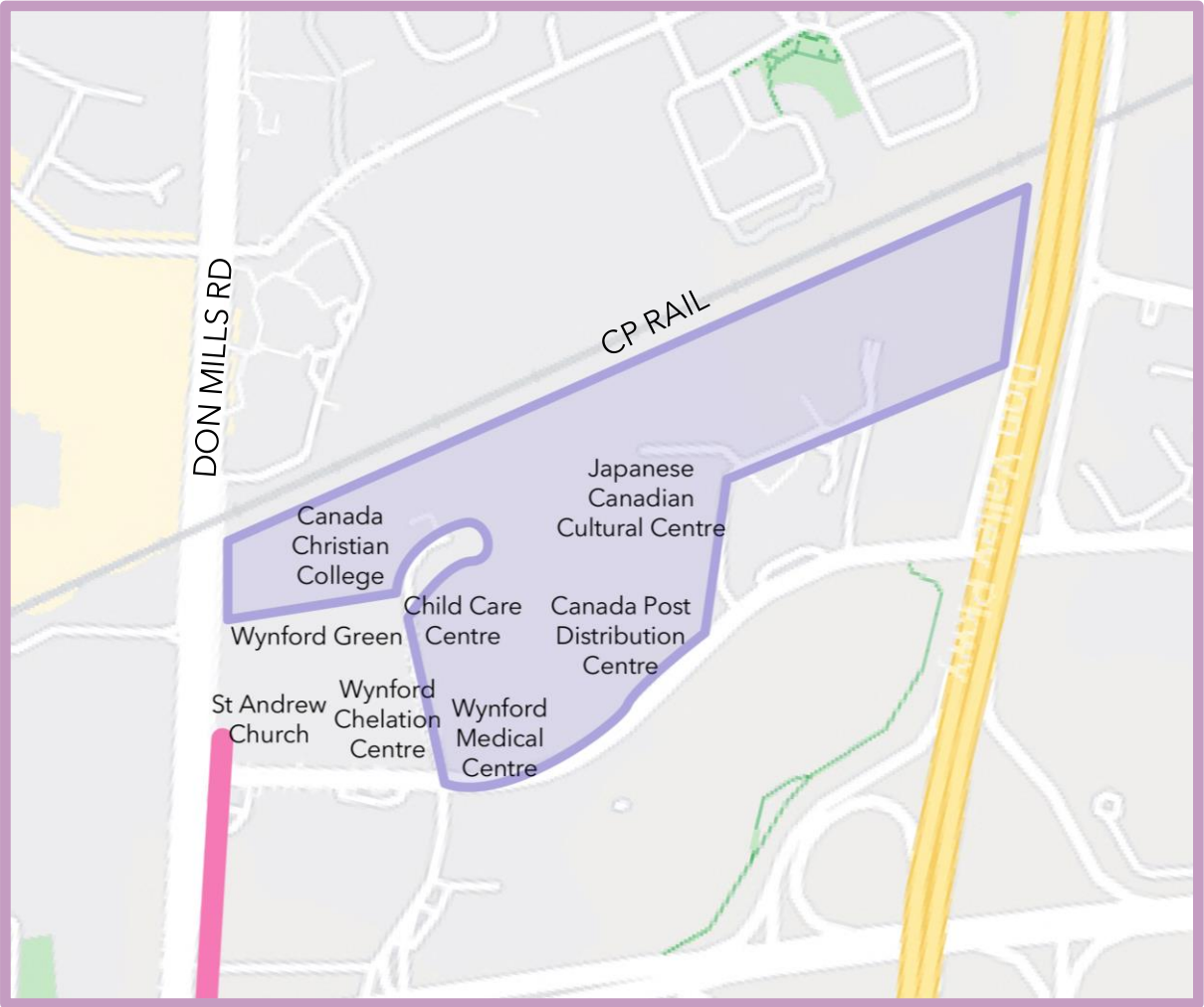
Cons

- Not large enough for future train storage needs
- Impact to area already approved for *Celestica/Crosstown Community* residential project (4,982 units, including a seniors facility), municipal community centre, and *Don Mills Crossing Secondary Plan*
- Neutralizes Don Mills-Eglinton development potential

Result

- **Screened out**

Option 7 - Wynford



Land Use	Low-density (under 3 storeys) commercial, institutional, office
Employment	2,100 *

Pros

- Compatible with land use designation (employment)
- Separated from residential uses by CP rail and the DVP
- Near to Ontario Line

Cons

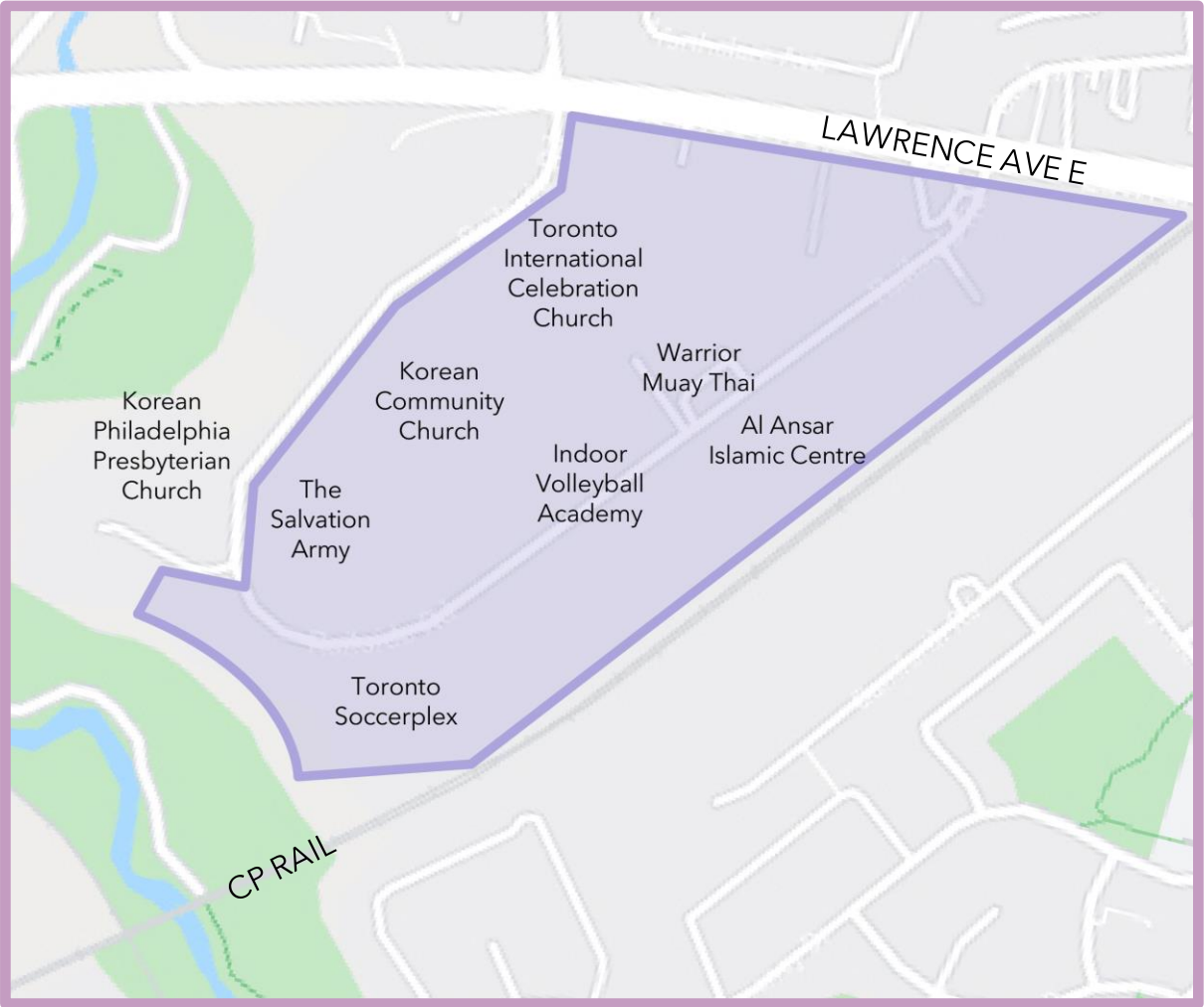
- Not large enough for train storage needs
- Impacts to cultural, educational, and health care destinations
- Impacts to Canada Post distribution site requiring negotiation with Federal Government

Result

- **Screened out**

* City of Toronto Employment Survey, 2019

Option 8 - Railside



Land Use	Low-density manufacturing / industrial (distribution centres), institutional, recreational
Employment	1,600 *

Pros

- Large enough for immediate and future train storage needs

Cons

- Far from mainline (approx. 2 km) resulting in higher construction and operating costs
- Additional river crossing and impact to valleys
- Impact to commercial, industrial, institutional, and recreational uses, including non-profit and religious uses
- Neutralizes development potential along Lawrence Avenue and “core employment” area

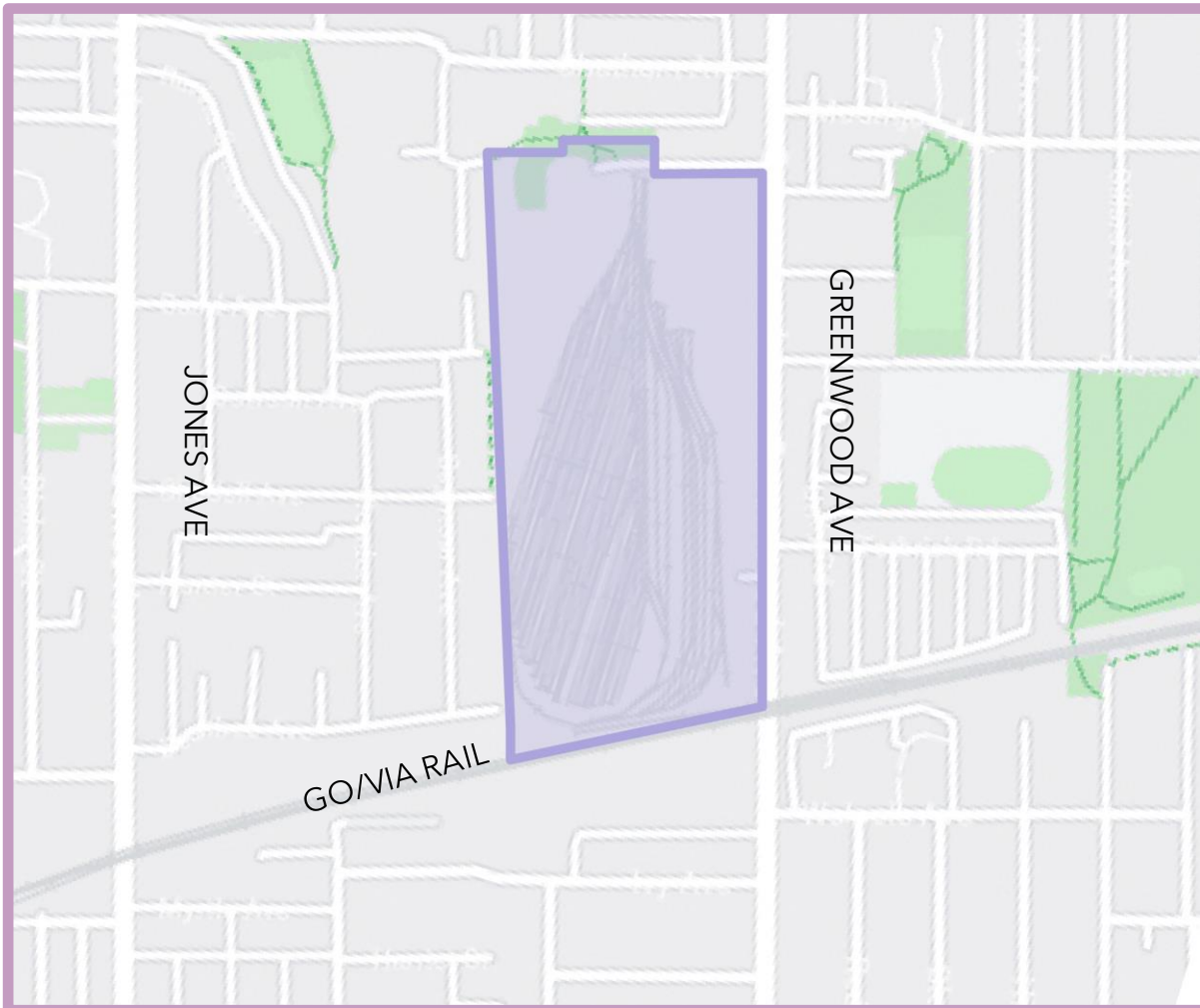
Result

- **Carried forward**

* City of Toronto Employment Survey, 2019

* Data obtained from City of Toronto Employment Survey, 2019

Option 9 - Greenwood Yard



Land Use	Existing TTC yard
Employment	Estimated 300-400 TTC employees

Pros

- Existing TTC yard, no change in land use
- Adjacent community adapted to living beside a rail yard

Cons

- High cost and schedule uncertainty/risk moving TTC subway yard
- Challenging and costly track connection - underground or via GO corridor
- Constrained for future expansion

Result

- **Carried forward**

Long-list Screening | Summary

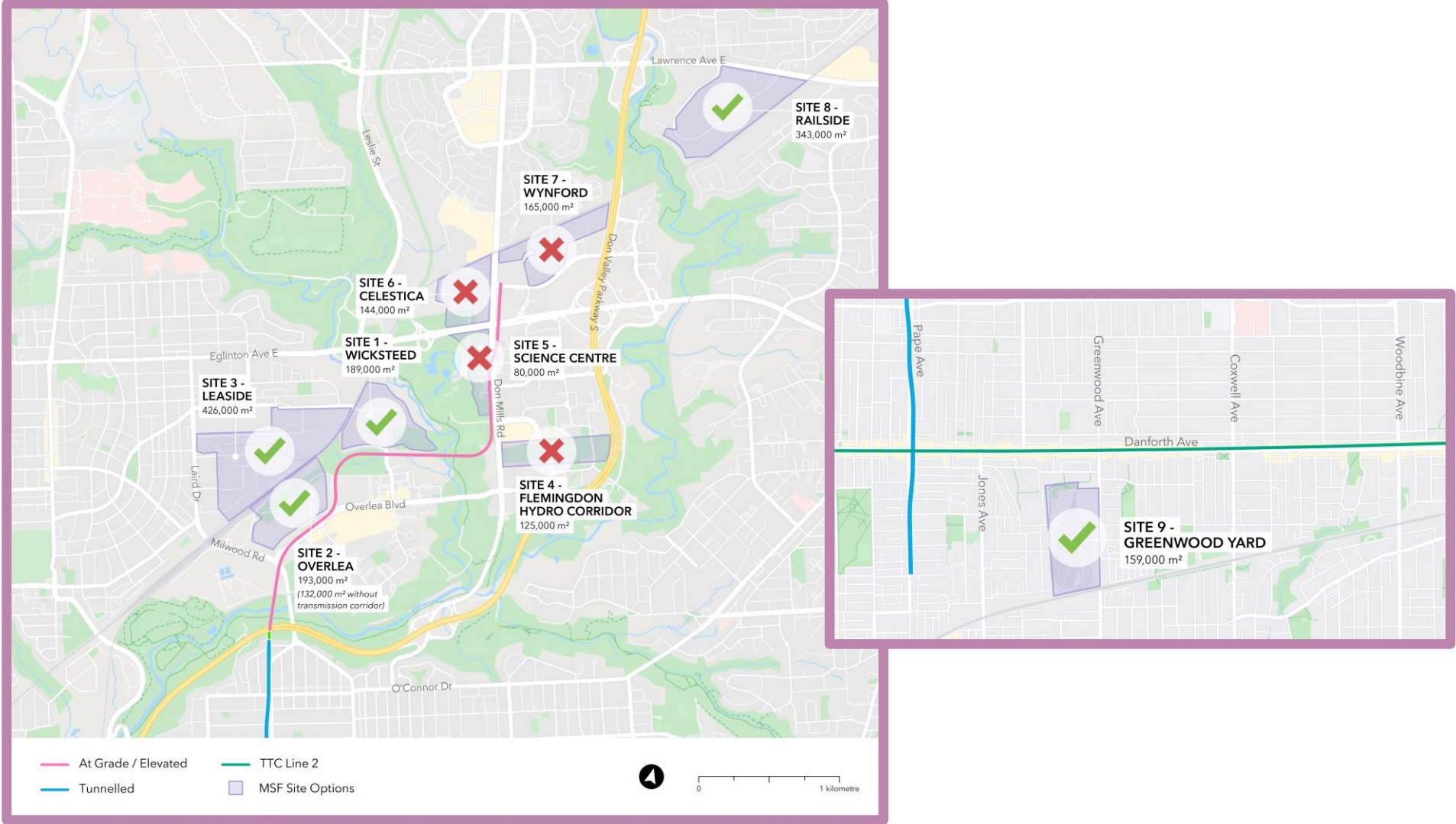
Site	Name	Distance from Mainline <i>m</i>	Space for 44 trains	Space for 10 trains	SHORT LIST
1	Wicksteed	190	Yes	Yes	Yes
2	Overlea	Adjacent	Yes	Yes	Yes
3	Leaside	410	Yes	Yes	Yes
4	Flemingdon Hydro Corridor	Adjacent	No	No	No
5	Science Centre	Adjacent	No	No	No
6	Celestica	Adjacent	Yes	No	No
7	Wynford	290	Yes	No	No
8	Railside	1,900	Yes	Yes	Yes
9	Greenwood Yard	830	Yes	No	Yes

Shortlist



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MSF Sites Shortlist



Shortlist Evaluation | Summary

Case	Measure	Site 1 - Wicksteed	Site 2 - Overlea	Site 3 - Leaside	Site 8 - Railside	Site 9 - Greenwood
Strategic	Surface Transportation Impacts	Closure of Wicksteed and Beth Nealson				
	Business Impacts ¹	up to 900 direct jobs impacted plus up to 8 fold indirect jobs	up to 1100 direct jobs impacted	up to 1900 direct jobs impacted plus up to 8 fold indirect jobs	1600 direct jobs	-
	Community Impacts		Major impacts		Major impacts to community services	Connection track impacts
	Environmental Impacts				300 m Don Valley crossing	Former landfill site, extensive remediation
Economic	Passenger Benefits	Comparable				
Financial	Cost ²			▲	▲	▲▲▲ ³
Deliverability & Operations	Constructability		Additional hydro corridor crossings	Risks crossing under CP and hydro corridor	Don Valley, DVP and CP crossings	Risk with connection tunnel and yard retrofit
	Schedule	Comparable				TTC relocation and connection track
		Preferred				

¹ Toronto Employment Survey (2019); Transportation Tomorrow Survey (2016); assumed TTC employment based on yard capacity and use

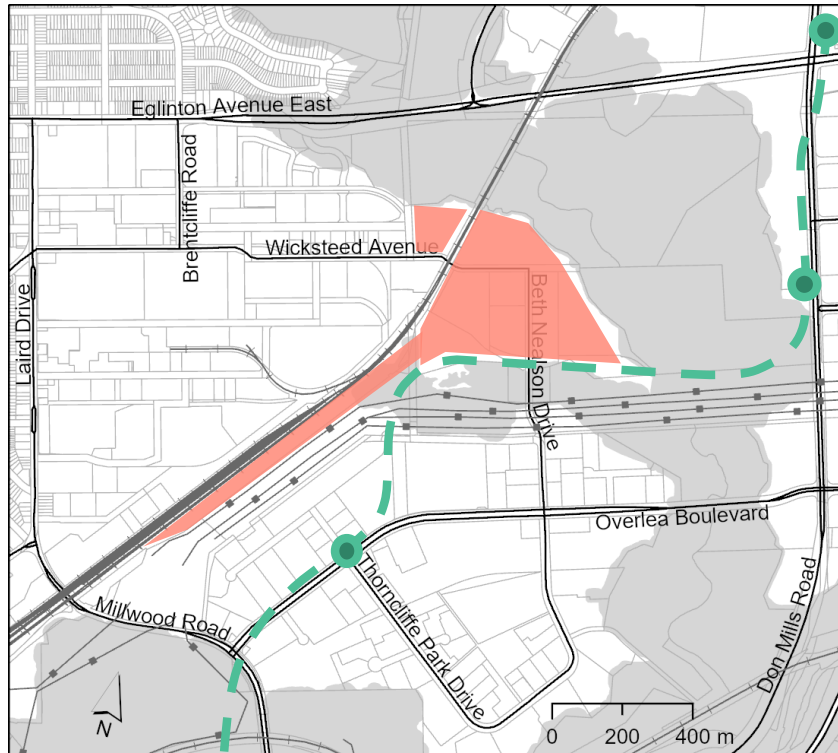
² Relative capital costs include construction, property and O&M costs based on 0-2% design - for high level comparison only

³ Accounts for cost new TTC yard, per TTC 15-year Capital Investment Plan & 2020 - 2029 Capital Budget & Plan - unfunded

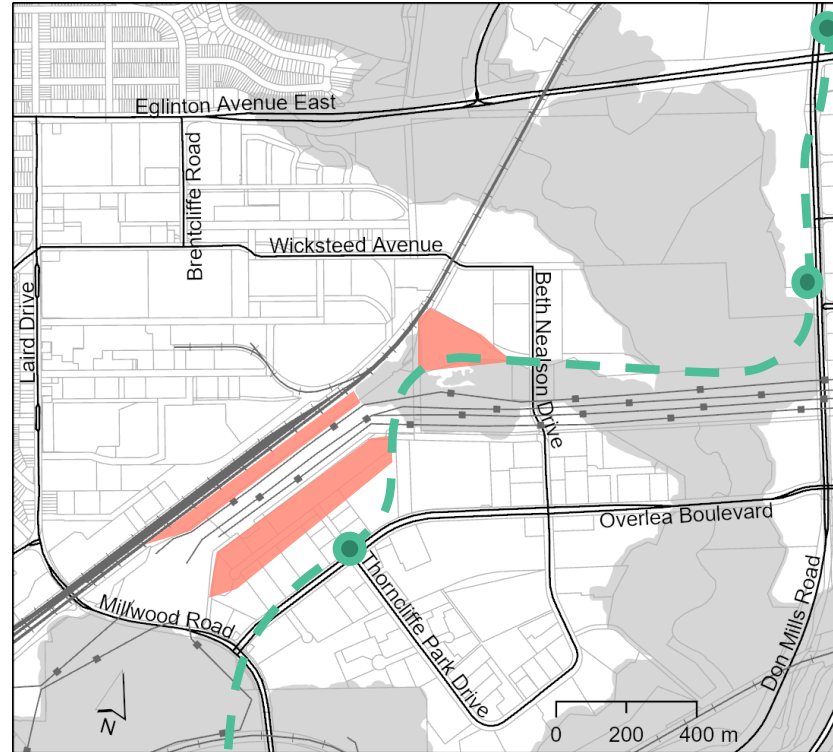
NB: Evaluation based on preliminary desktop analysis of alternatives. Further design and site investigations required to confirm impacts, mitigation, cost and schedule risk.

Refined Shortlist Options

Revised Wicksteed Option



"Hybrid" Option

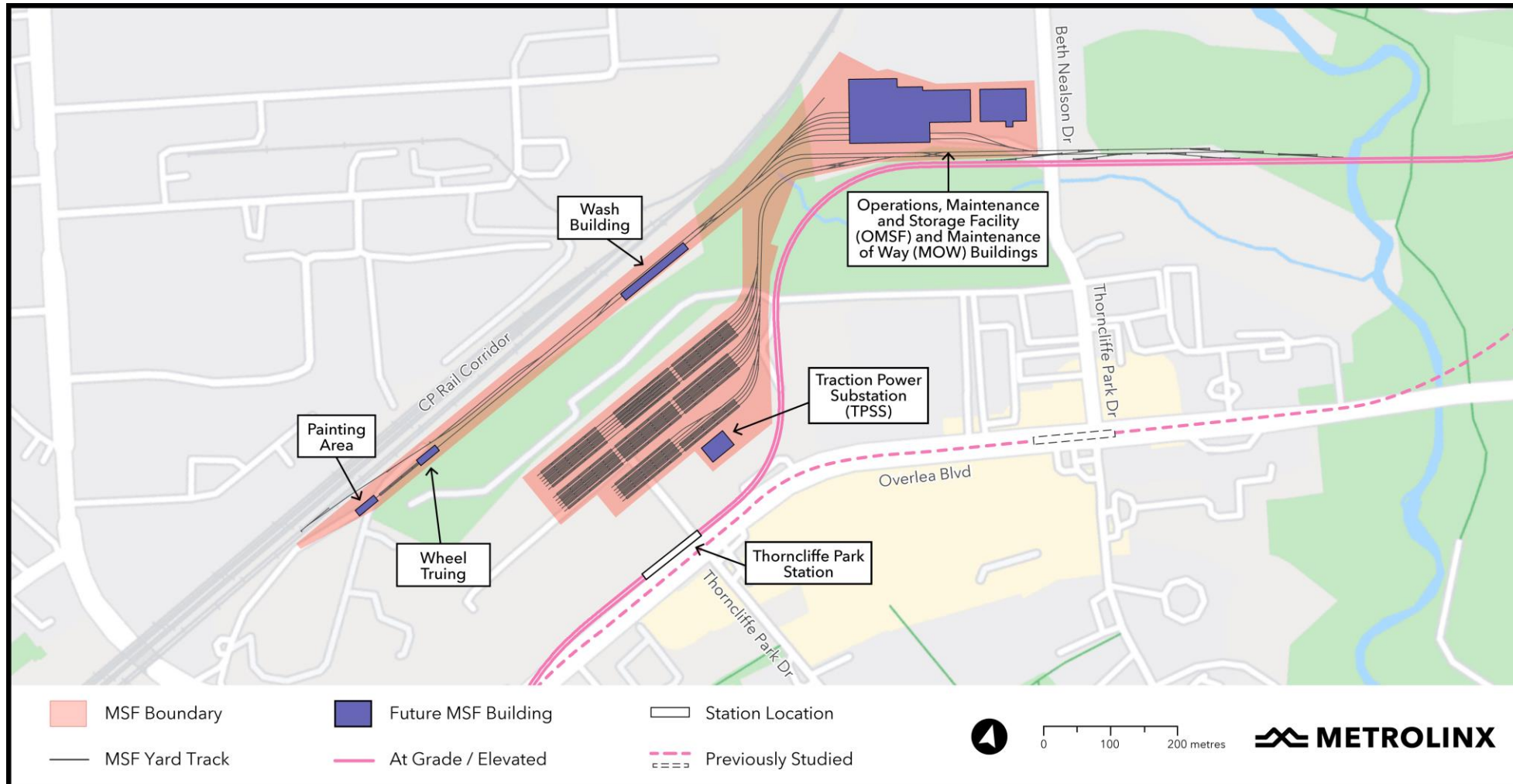


Additional design work was undertaken on the two preferred areas to minimize community and environmental impacts and confirm feasibility of layout

Options Evaluation | Summary

	Revised Wicksteed Option	Hybrid Option
Transportation Impacts	Permanent closure of Beth Neilson and Wicksteed	No major road closures; Beth Neilson underpass required
Business Impacts	More jobs impacted (1050 jobs & 16 businesses)	Fewer jobs impacted (700 jobs & 57 businesses)
Business Relocation Risks	Risk of permanent job losses during relocation of primarily manufacturing uses: Tremco, Siltech, Innocon, Lincoln Electric, & Parkhurst	Majority of Wicksteed manufacturing remains; smaller Thorncliffe businesses can be relocated to avoid job losses
Community Impacts	Isolated site with limited impacts	Manageable disruption to local business/employment/community support as they can be relocated within Thorncliffe
Noise & Vibration	Separated from residential	Closer to residential, additional mitigations required
Natural Environment	Direct loss to natural areas within the Don Valley West Branch and Walmsley riparian area	Additional crossings of natural area and valley slope
Cost	Comparable	
Constructability	Comparable	
Schedule Risks	Agreement on acceptable solutions to Beth Neilson and Wicksteed road closures	Complex property acquisition given number of property owners and tenants
Operational Efficiency	Combined site, most efficient	Split site, less efficient
Preferred		

Current MSF Design



◀ Following the selection of the preferred hybrid layout, further design work was undertaken to optimize the area to limit impact to commercial area



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