

Montreal's Mega Project

The Réseau Express Métropolitain (REM)



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RAIL CONFERENCE //



The Réseau Express Métropolitain (REM)

- What is REM ?
- When is it happening ?
- Who are the Stakeholders?

- Challenges in the engineering delivery of a \$ 5 billion Fast Track project
- How to keep it balanced and moving
- From engineering to construction



The Réseau Express Métropolitain (REM)

1. What is REM ?



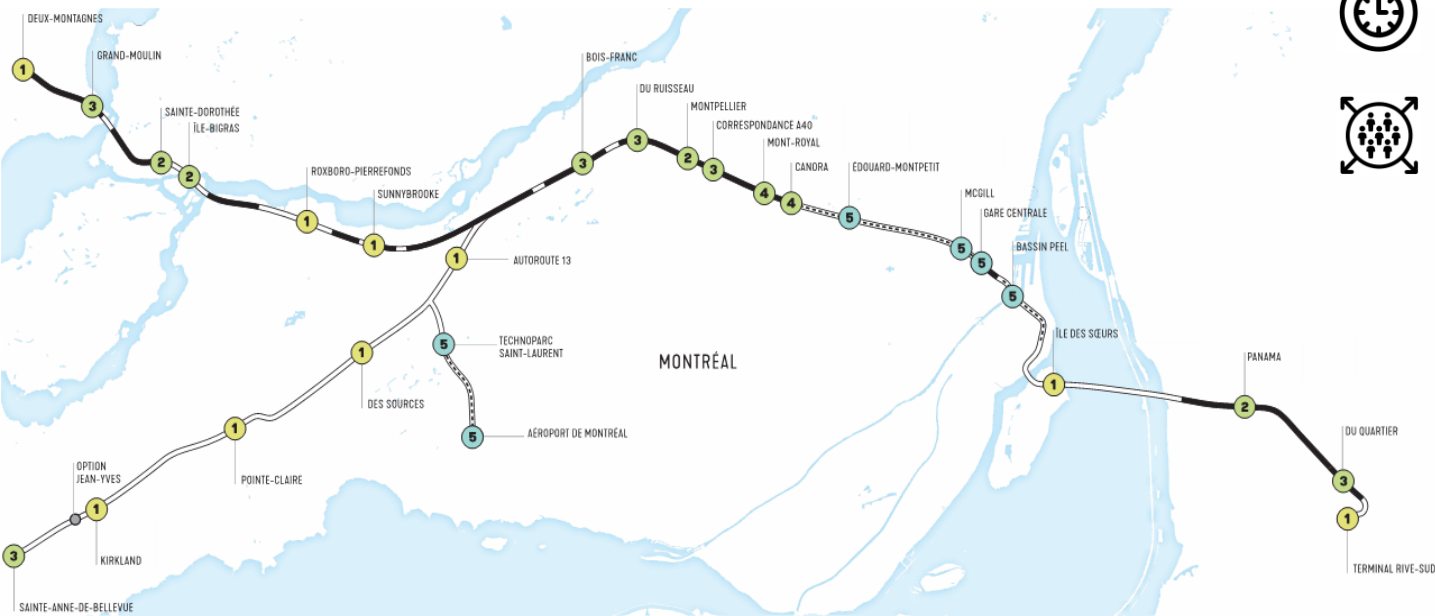
Fully Automated system (Driverless)



20 hours per day



24 000 pphpd (Ultimate capacity)



The Réseau Express Métropolitain (REM)

1. What is REM ?



67 km of track



8 km of tunnel



26 stations



Universal access



105 bus platforms



+ **9500** parking spots



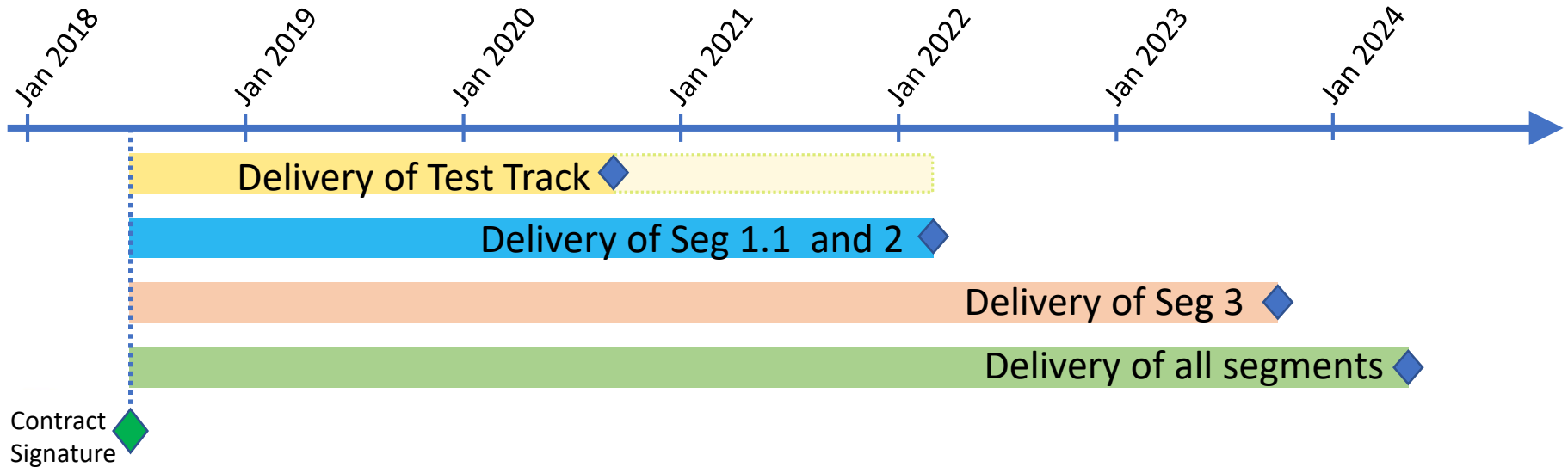
+ **1400** bike racks



3 maintenance and storage facilities

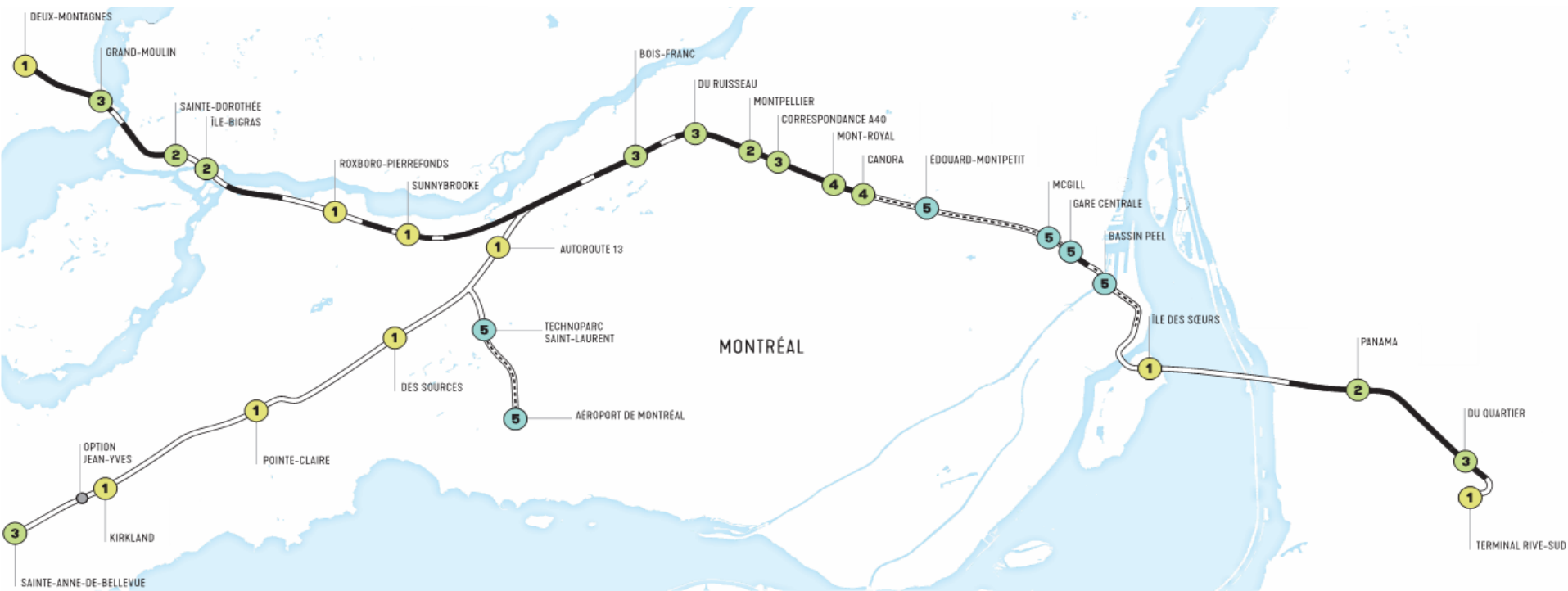
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2. When is it happening ?



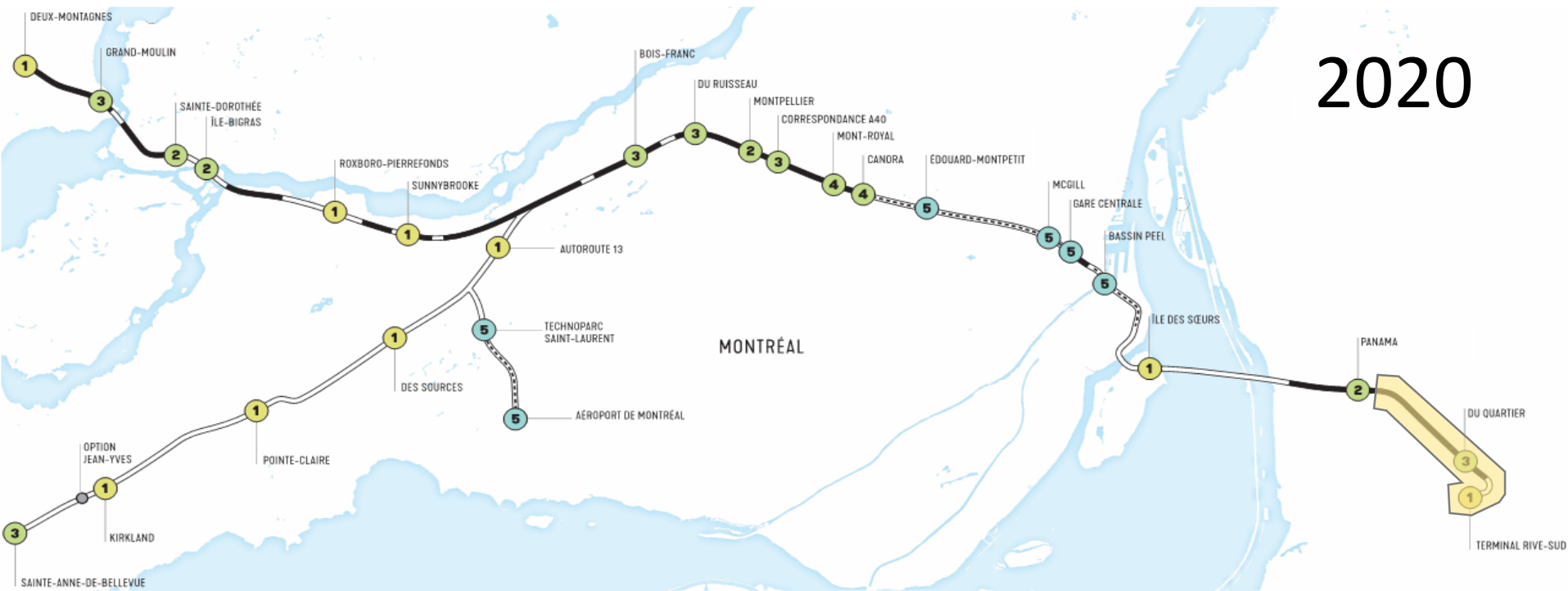
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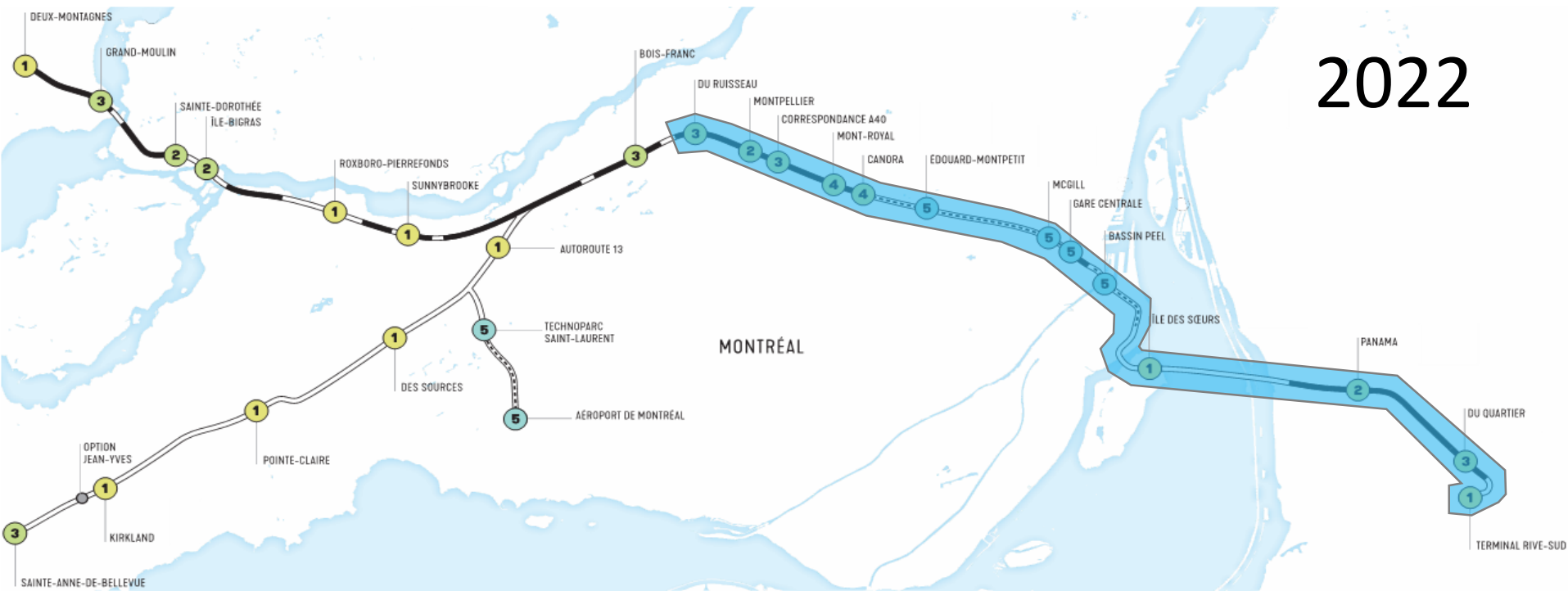
The Réseau Express Métropolitain (REM)

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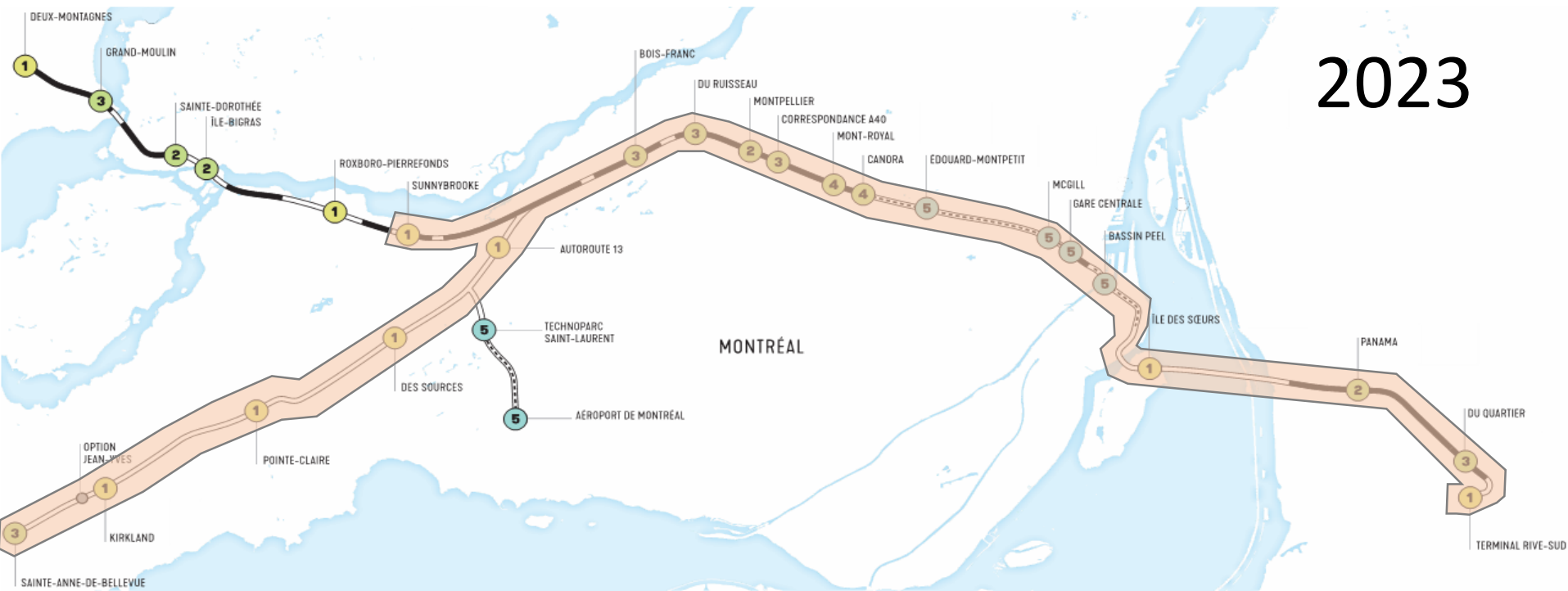
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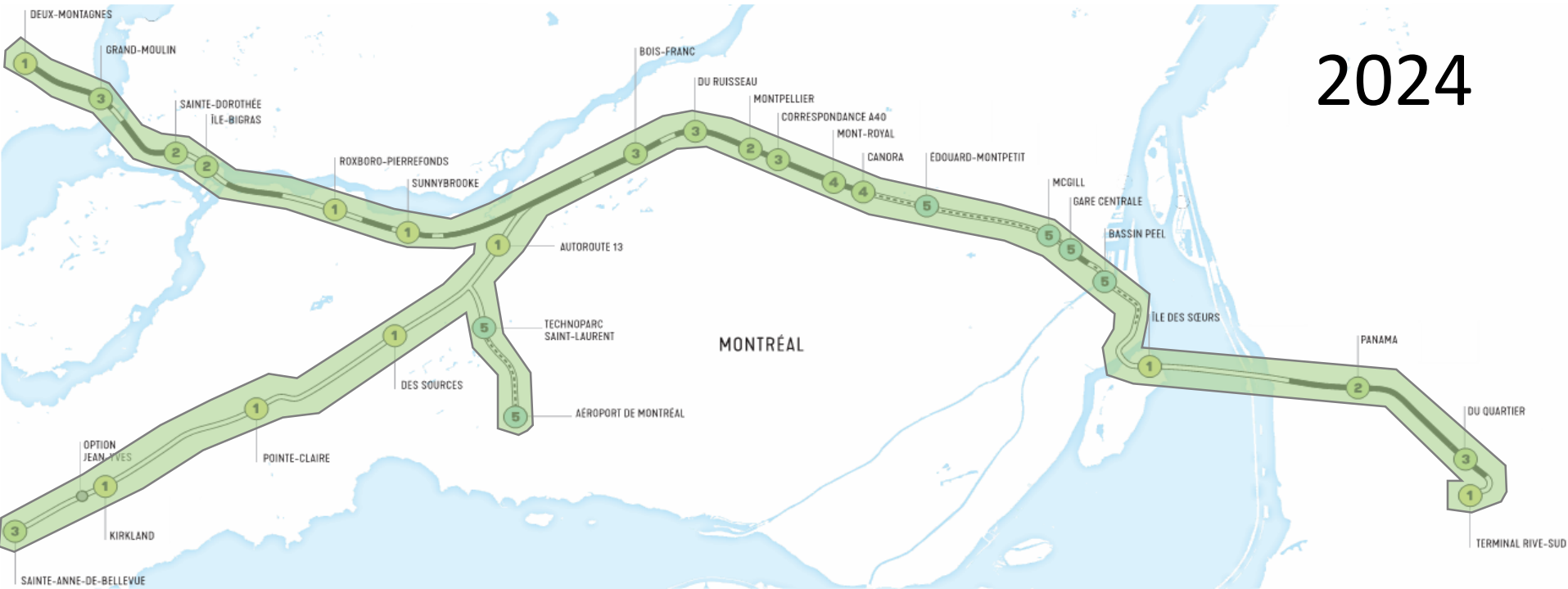
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2. When is it happening ?



The Réseau Express Métropolitain (REM)

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The Réseau Express Métropolitain (REM)

3. Who are the Stakeholders ?

CDPQ Infra

EPC Contract

Construction Joint Venture



Engineering Joint Venture



Interface

RSSOM Contract

Rolling Stock,
Operation and
Maintenance



The Reseau Express Metropolitan (REM)

4. Challenges in the engineering delivery of a \$ 5 billion Fast Track project



XXX person working on a daily basis



XX countries



Multiple languages



Overlapping of Engineering and
Site supervision



Over 10 municipalities



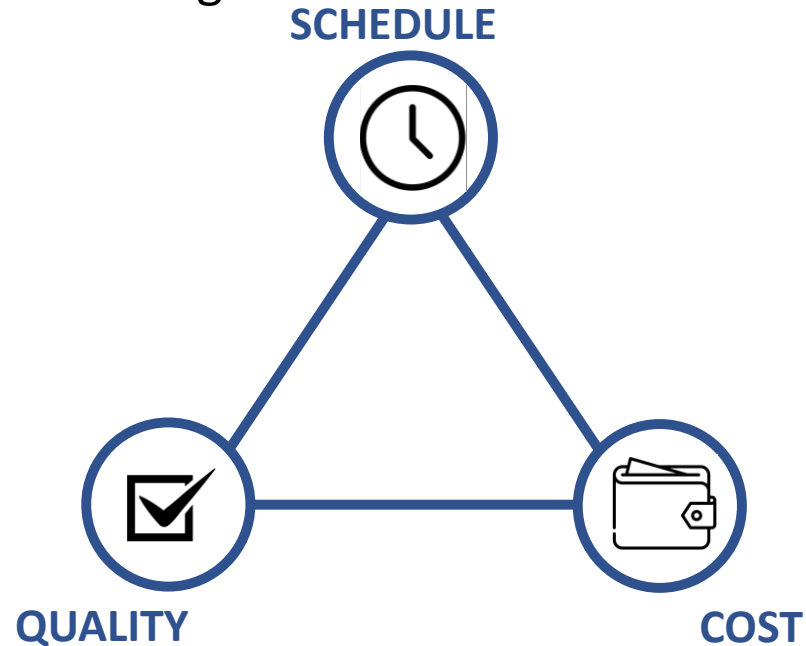
XX documents per week



XX comments response per week

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5. How to keep it balanced and moving ?

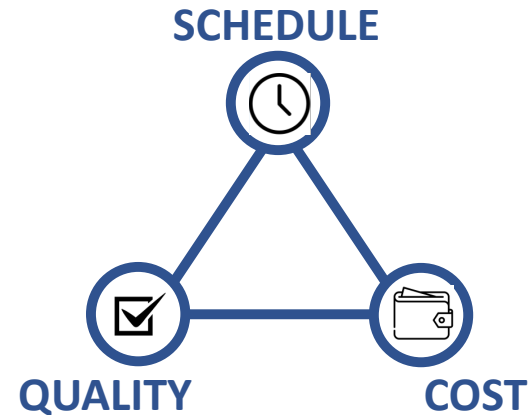


The Reseau Express Metropolitan (REM)

5. How to keep it balanced and moving ?

...through **Organization** Structure:

- ONE TEAM approach
- Colocation
- Flexible and agile

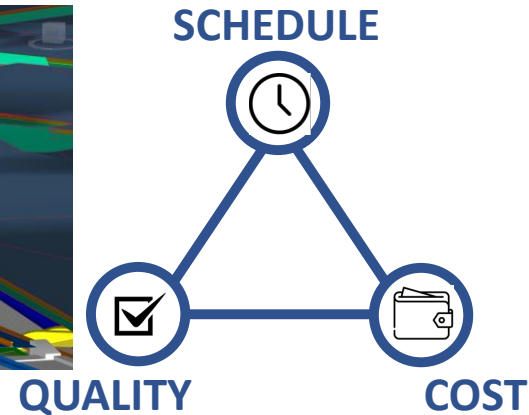
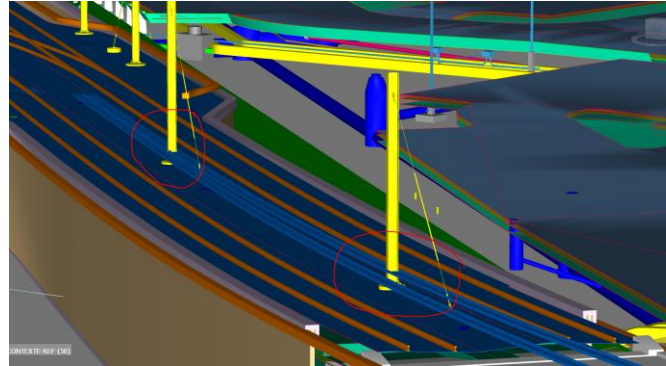
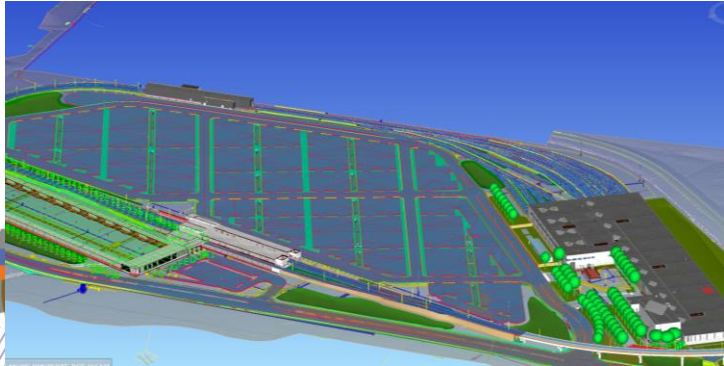


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5. How to keep it balanced and moving ?

...through use of **technologies**:

- 3D design and modeling
- BIM and collaborative platform

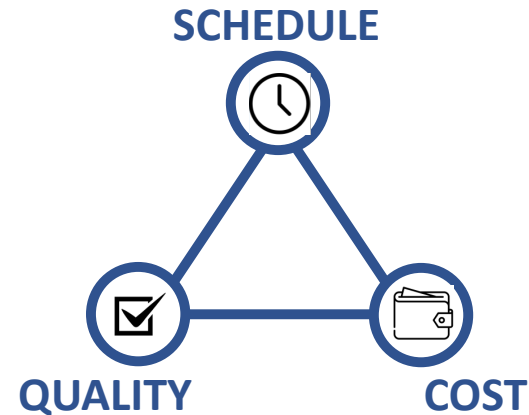


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5. How to keep it balanced and moving ?

...through work **environment**:

- Open and clear communication
- Who, what, and when

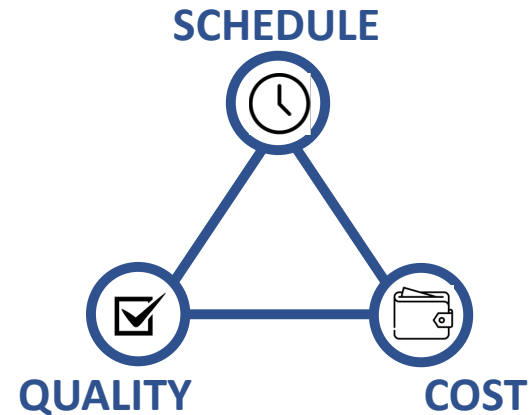


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5. How to keep it balanced and moving ?

...through **engagement** of people:

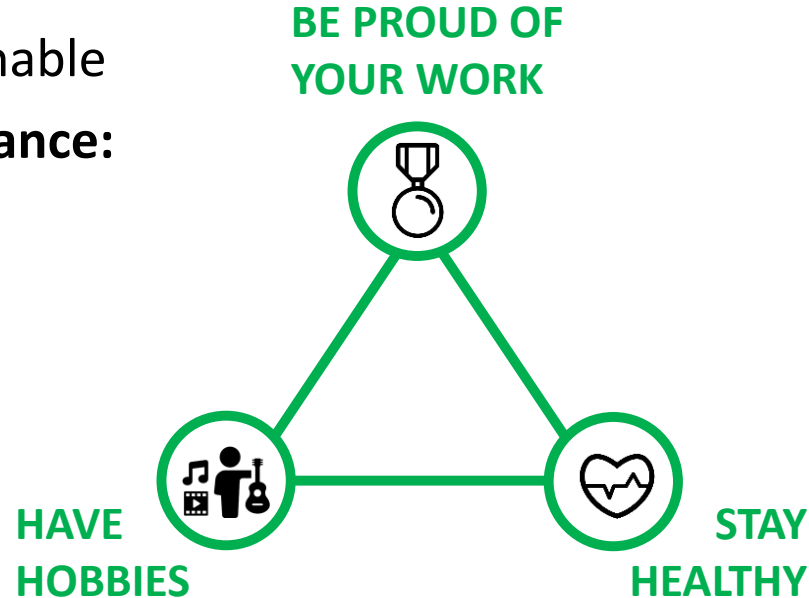
- Focus on them
- It is marathon, we are here for the long run



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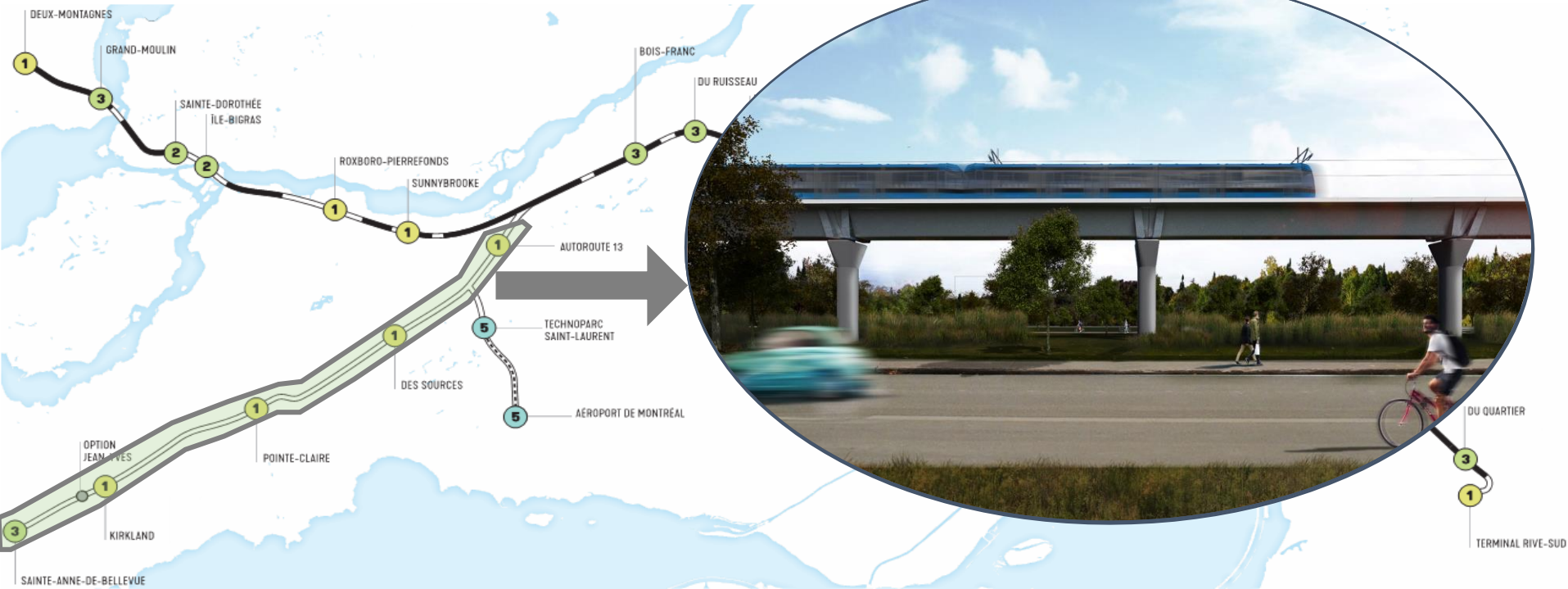
5. How to keep it balanced and moving ?

Key to ensure sustainable
team performance:



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6. From engineering to construction



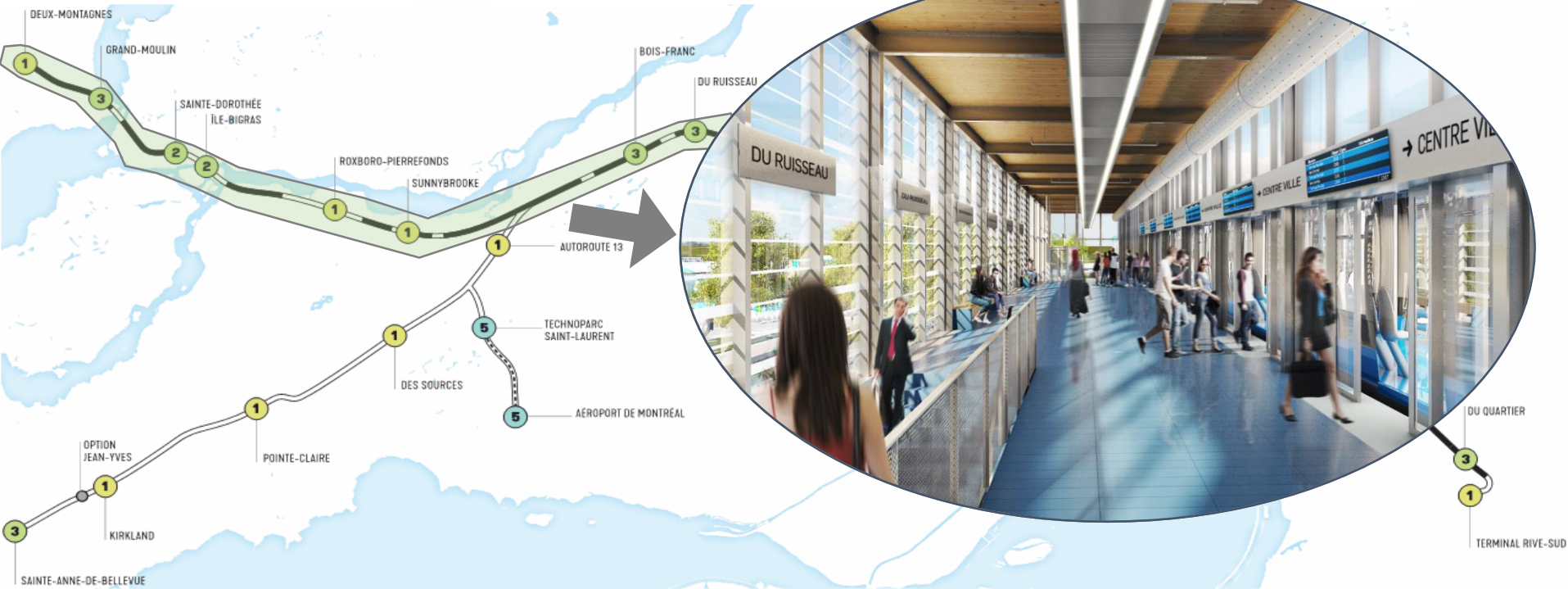
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6. From engineering to construction



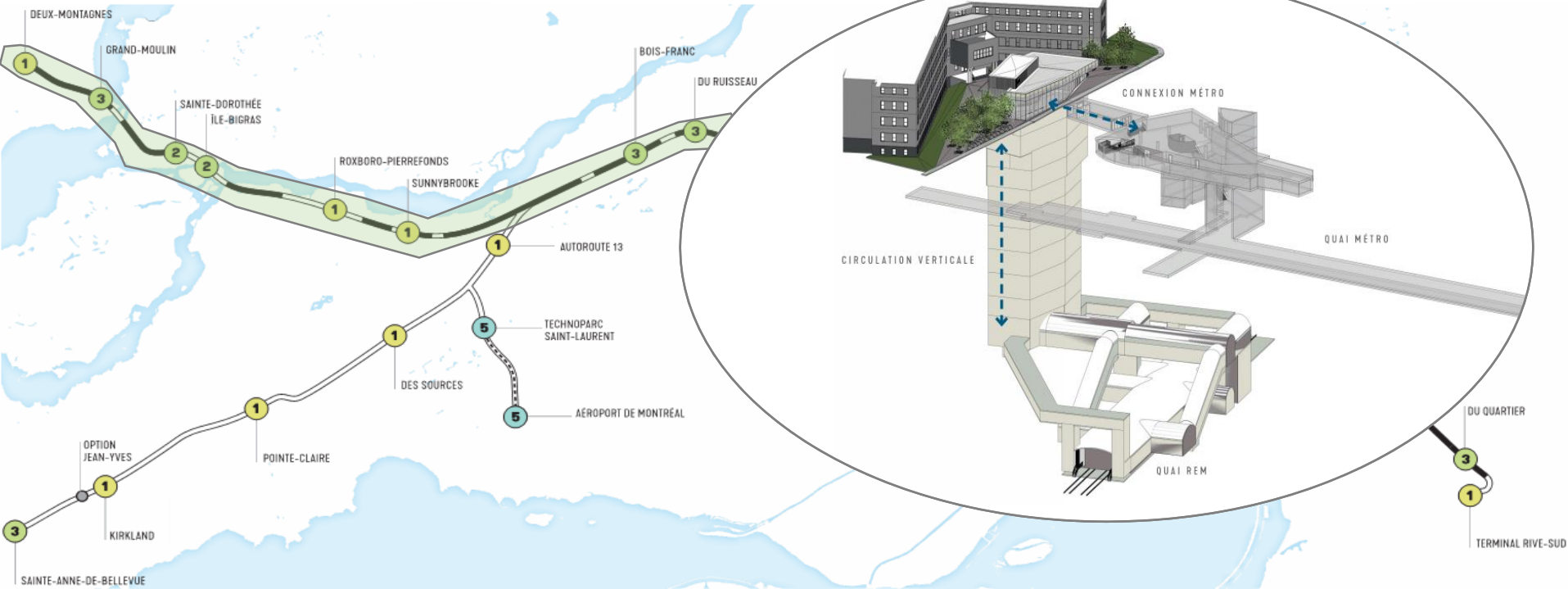
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6. From engineering to construction



The Réseau Express Métropolitain (REM)

6. From engineering to construction



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