

Information Session

**Proposed improvements to
the 315-25kV Saint-Jean substation
project and its 315-kV supply line
resulting from the work of the
DDO/HQ Liaison Committee**

October 15, 2018

Overview

1. **Mayor's address**, Alex Bottausci
2. **Creation of the Liaison Committee**, by Jack Benzaquen
3. **Liaison Committee's process**, by Jacques Bénard
4. **Recommendations regarding the construction of the substation**, by Louis-Philippe Bérubé
5. **Recommendations on the type and location of pylons**, by Michele Asmar and Anna Polito
6. **Landscaping**, by Pierre Vaillancourt
7. **Timetable**, by Pierre Vaillancourt

Break

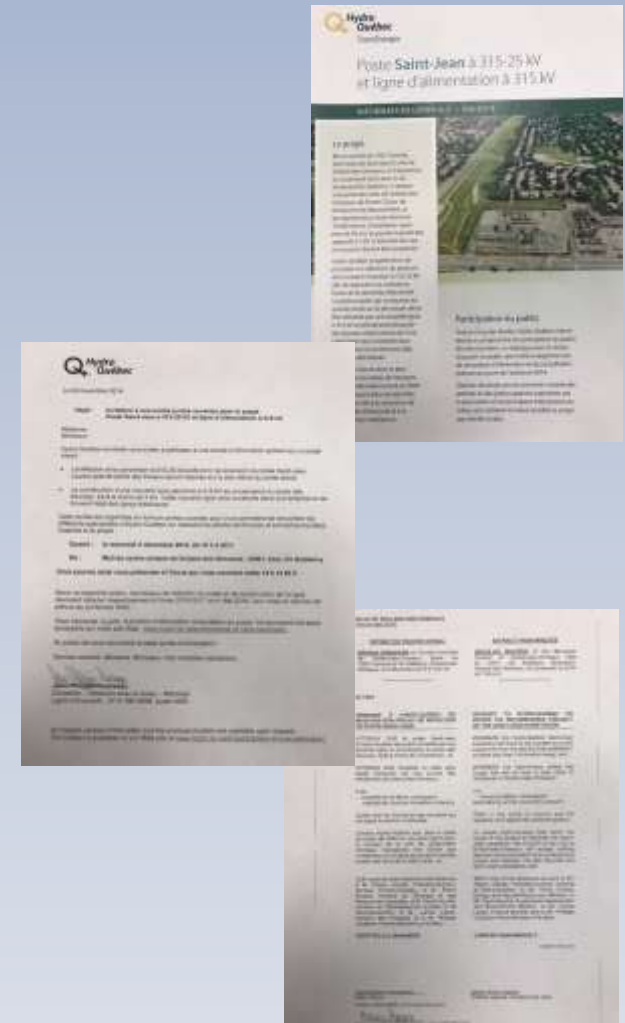
Question period

1. Mayor's address

2. Creation of Liaison Committee

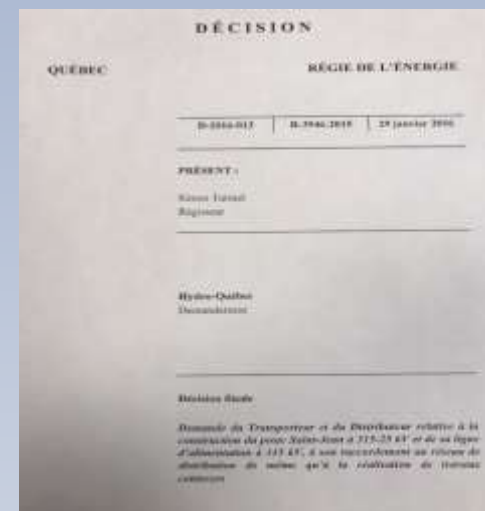
Phase 1 – Preliminary steps

2013	Hydro-Québec informs the City of the project
November 11, 2014	Project is presented to City Council
December 3, 2014	Hydro-Québec organized an open house information meeting at the Civic Centre
December 9, 2014	Resolution 14 1202 adopted: The City requests an underground solution



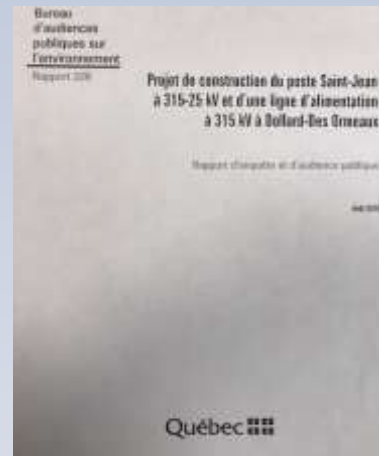
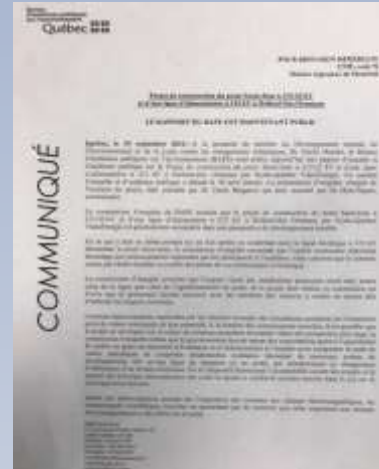
Phase 2 – Régie de l'énergie

October 8, 2015	Hydro-Québec submitted their project, for approval, to the Régie de l'énergie
January 29, 2016	Régie de l'énergie renders its decision



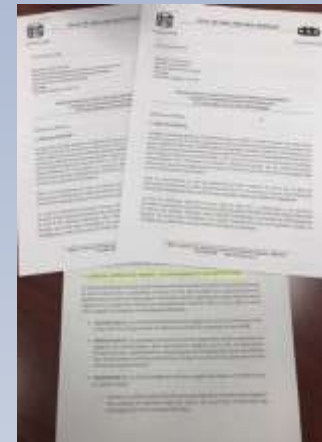
Phase 3 – Bureau d’audiences publiques sur l’environnement (BAPE)

April 2016	Beginning of the inquiry mandate and public hearings
April 20–21, 2016	First part of public hearings
May 17, 2016	Second part of public hearings
September 29, 2016	BAPE report made public

[illegible][illegible]

Phase 4: Government Decree and creation of the Liaison Committee

October 2016	Letters from the City of Dollard-des-Ormeaux to the Finance and Environment Ministers
January 14, 2017	Informal meeting – City/Political attachés/HQ
February 8, 2017	Decree 77-2017 : creation of the DDO/HQ Liaison Committee
May 2, 2017	Meeting with mediator : sensitization / awareness
May 10, 2017	First meeting of the Liaison Committee



Why create the Liaison Committee?

In compliance with the decree, make recommendations to carry out the best project while:

- maximizing the benefits for both the City and its residents
- Limiting, as much as possible, the impacts on the City and its residents.

Phase 5: Liaison Committee work

3. Liaison Committee's Process

Committee members

Jack Benzaquen – City Manager, City of DDO

Anna Polito – Director, Urban Planning and Engineering,
City of DDO

Michele Asmar – DDO resident (meetings 8–12)

Ed Janizewski – Former mayor of DDO (meetings 1–7)

Louis-Philippe Bérubé – Projects Manager, HQ

Jean-Philippe Rousseau – Advisor – Community Relations,
HQ

Pierre Vaillancourt – Environmental Projects Manager, HQ

Committee mandate

Within the parameters of the Decree authorizing the project, make recommendations to the City of DDO and HQ on how to improve the project with respect to:

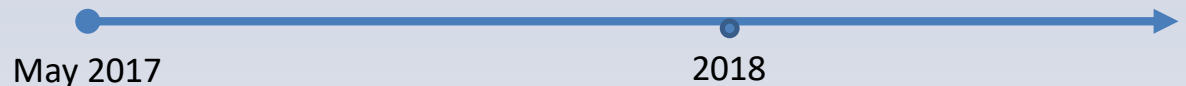
- Number, type, height and location of pylons
- Landscaping within the servitude and around the Saint-Jean substation
- Integration of non-technical aspects within the environment (wall, landscaping, fence, mitigation measures during construction, etc.)

Ground Rules

- Six members: three DDO, three HQ
- Mediator: neutral, impartial third party
- Sharing of information and transparency between members
- Consideration for all parties
- Decision making by consensus
- Communications

Process summary

	Meetings											
Subjects discussed	1	2	3	4	5	6	7	8	9	10	11	12
Ground rules	✓							✓				
Project – Common understanding	✓	✓										
Substation layout		✓	✓	✓	✓	✓	✓					
Types of pylon structures					✓	✓	✓	✓				
Pylon locations						✓	✓	✓	✓	✓	✓	✓
Landscaping n the servitude							✓	✓	✓	✓	✓	
Public presentation											✓	✓



Site visit

4. Recommendations regarding the construction of the substation

Project location



Existing substation: built in 1957



Project submitted to BAPE

(Visual simulation, substation in 2020)



Revised project by DDO-HQ Liaison Committee



Main improvements

- Unconventional layout of substation to keep architectural wall and equipment away from properties
- 18 m landscaped green space
- Mitigation measures:
 - reduction of sound emissions
 - elimination of shadows on residential properties
 - extension of the architectural wall on the south side

5. Recommendations on the type and location of pylons

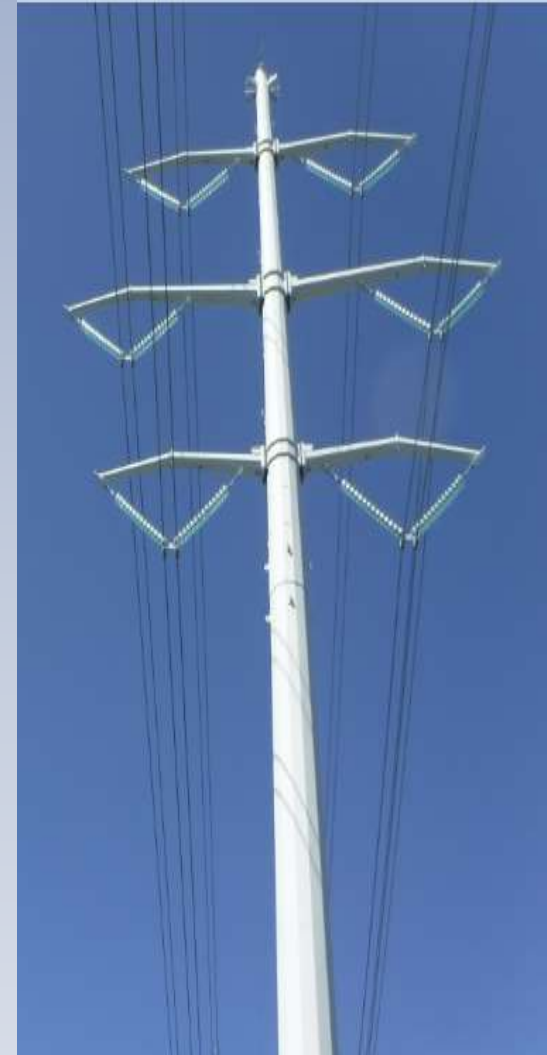
Selection criteria for new pylons

Visual interest (look of pylon)	Size impact (presence of pylon in the environment)	Visual integration (integration of pylons within the servitude)
1. Appearance	1. Height of pylon	1. Visual integration with existing 120-kV pylons
2. Transparency	2. Diameter of pylon base or footprint	2. Visual integration with existing 315-kV supply line (east of Sources Boulevard)
3. Susceptible to graffiti, so needs more maintenance	3. Volume of structure	

Tubular steel pylon

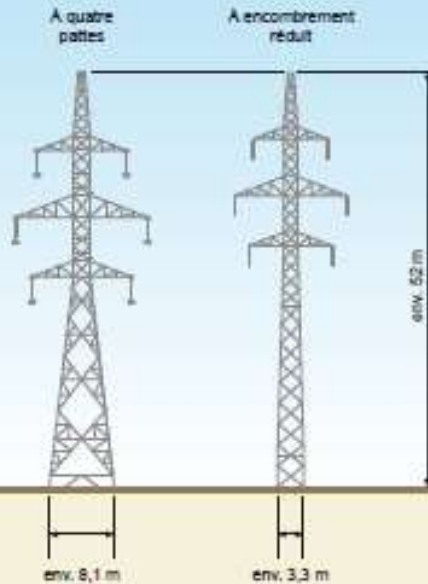


- More contemporary design
- Simple, compact structure, relatively smaller (height, volume and footprint)
- Opaque, solid mass that you cannot see through
- Susceptible to graffiti, so needs more maintenance

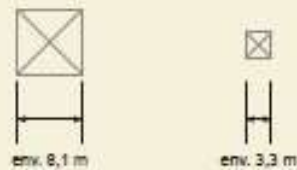


Lattice pylon

Vue en coupe



Vue en plan



- Reduced-footprint lattice structure
- Transparent: lets light through
- Lattice design reduces the apparent size
- Visual integration with the existing 120-kV pylons and also with the existing 315-kV lattice structures located east of Sources Boulevard within the servitude

Option selected



Reduced footprint pylon
(selected) next to large footprint
pylon



DDO – Current situation in
right-of-way east of Sources

Pylon location

**Goal: Minimize visual impact of the pylons
on homes directly on the servitude**

Steps taken:

- Determine the criteria for positioning pylons
- Analyze each pylon location and determine the options that could minimize visual impact for affected residents
- Determine feasibility of each option (by HQ)
- Visualize various options for pylon locations:
 - Use specialized software (e.g., Google Maps, Autocad, etc.)
 - Use scaled versions of paper plans of the proposed locations in each option
 - Install markers on site of the proposed pylon locations, based on their georeferenced global positioning
- Analyse each option; committee chose the one that minimized the visual impacts for the affected residents (5 meetings needed)
- Submit to City for approval

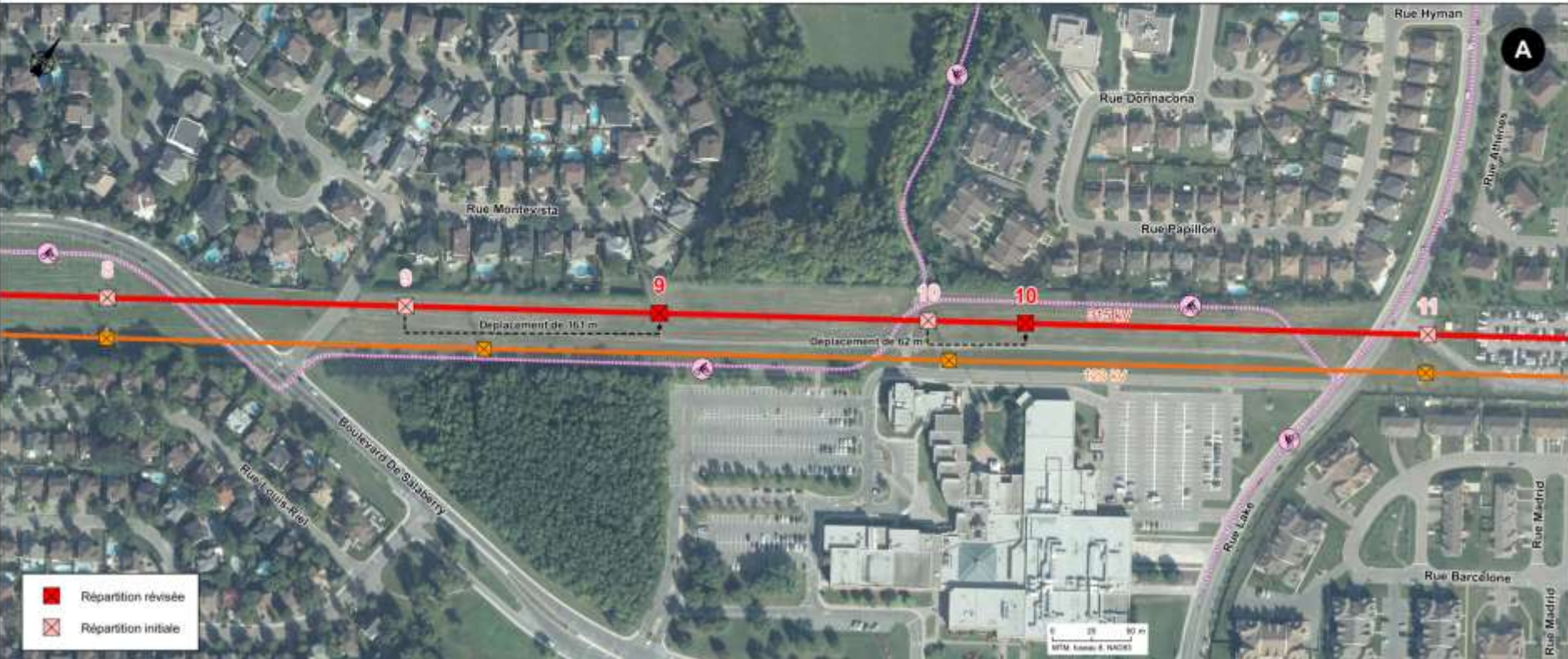
Criteria used to determine pylon locations

Criteria: tower locations

- Technical limitations on locations (angle tower, underground infrastructure, etc.) – Determining factor
- Juxtaposition with existing towers on 120-kV line – Preferred
- In line with property lines – Preferred
- Near street corners – Preferred
- Oblique view from properties – To be avoided
- Pylon height (depends on spacing) – To be limited

Revised locations of pylons

Répartition avec 11 pylônes à 315 kV



6. Landscaping

Concept diagram

Sector around the Saint-Jean substation



Concept diagram

City Hall and Centennial Park sector



Concept diagram

City Hall and Centennial Park sector

An urban park at the heart of the area



Planning design Around the Saint-Jean substation



Planning design – Around the Saint-Jean substation

Landscape Details along De Salaberry Boulevard



Inspirations:



Visual simulation

Intersection of Saint-Jean and De Salaberry Boulevards



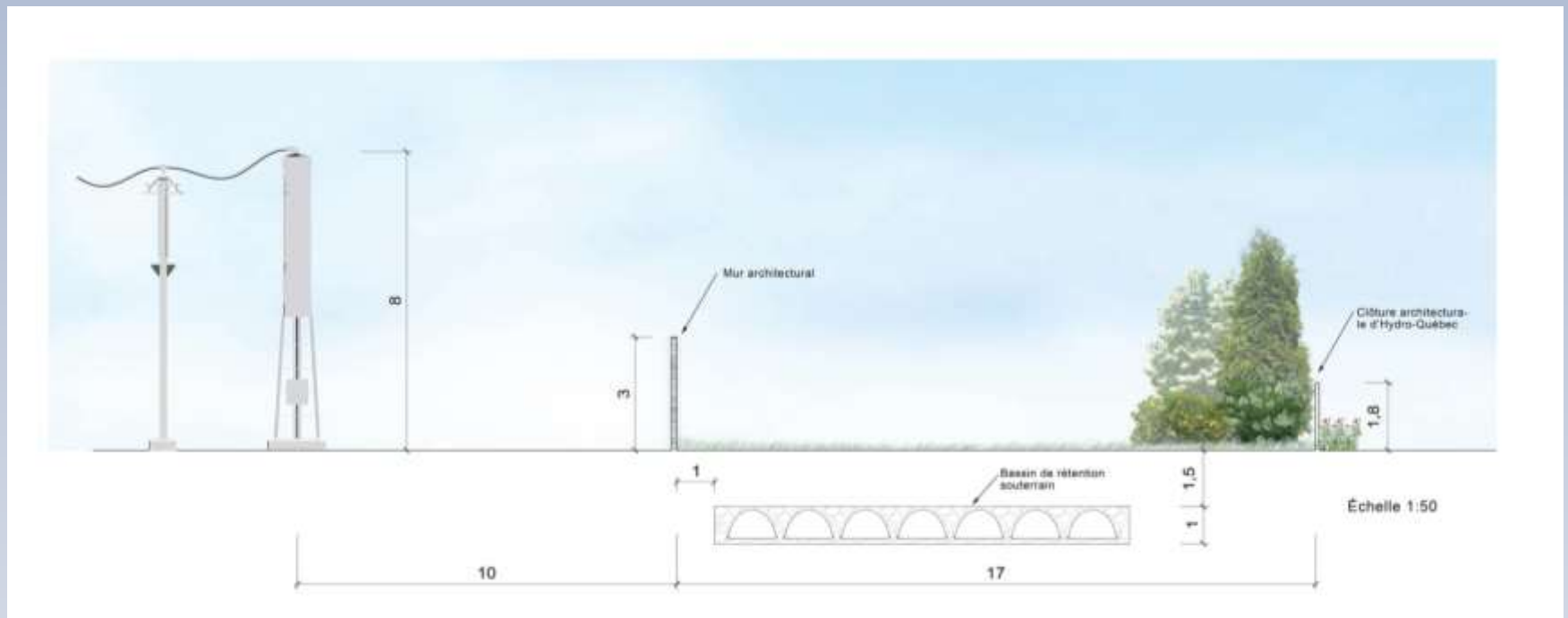
Visual simulation

Overview of the Saint-Jean substation with the improvements proposed by the Liaison Committee



Planning design

Cross-section of the buffer zone between the Saint-Jean substation and the homes on Place des Pins



Planning design

Typical intersection



Planning design Frontenac Street



Planning design Tecumseh and Thornhill Streets



Planning design

Des Sources substation



7. Timetable

Project timetable

Substation

- Start of work Spring 2018
- Moving 120-kV lines Summer 2018
- Construction of control building Fall 2018
- Electrical equipment Fall-winter 2018–2019
- Landscaping around the substation Spring-summer 2020

Line

- Tower foundations Fall 2019
- Assembling and raising towers Winter 2019–2020
- Unreeling and installing lines Spring 2020
- Landscaping in the servitude Summer-fall 2020

Commissioning facilities

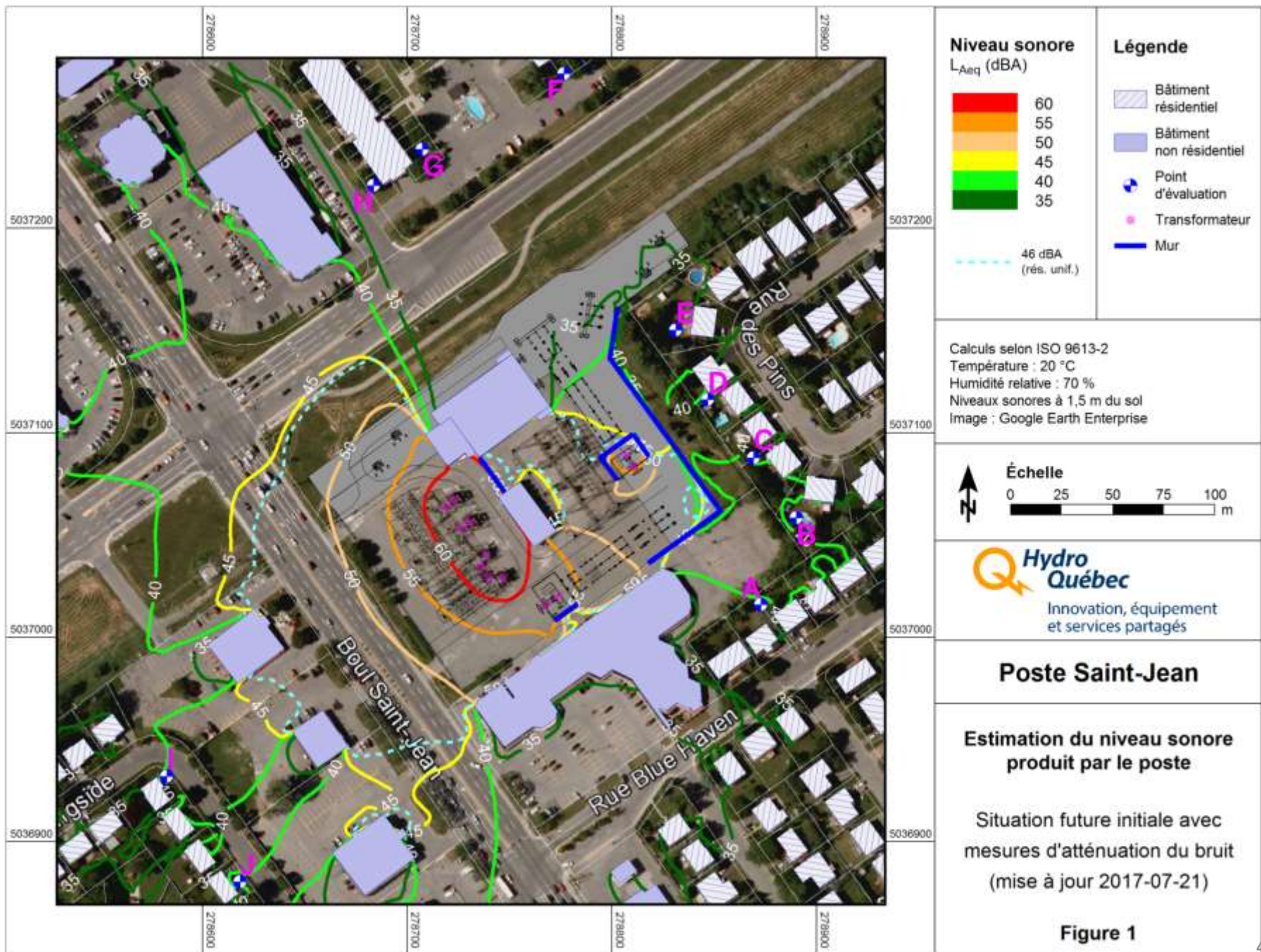
Late 2020

Break

Sign up for question period

Question Period

Closing Remarks

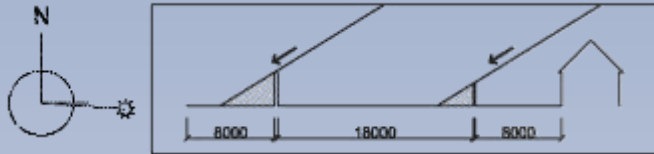


Shadow Study

3-m architectural wall

June 21, 2017, 8 p.m.

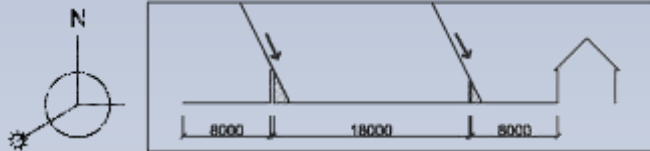
June 21, 9 p.m.



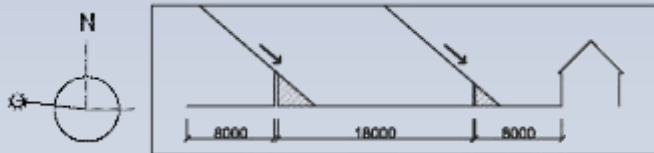
June 21, noon



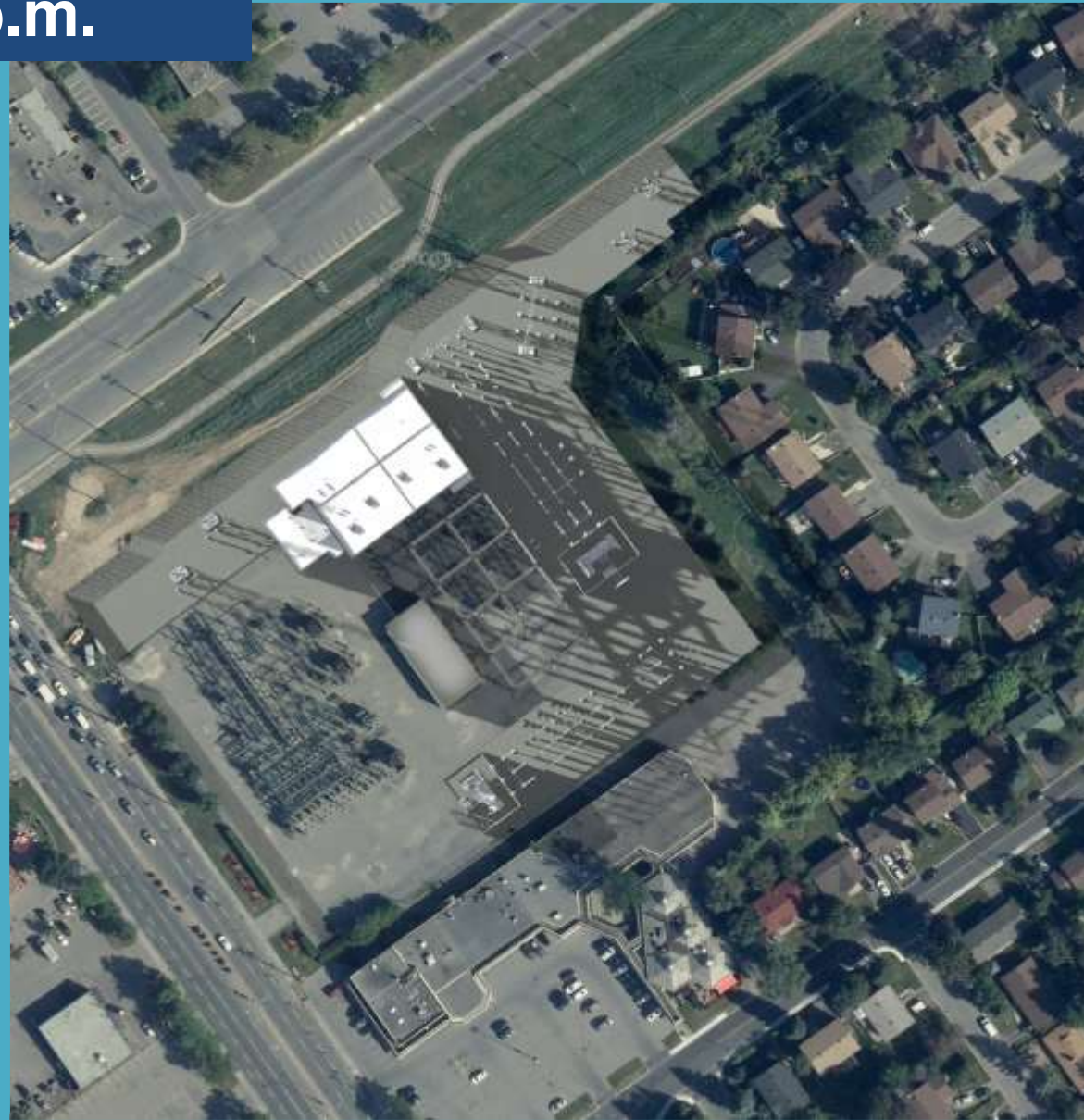
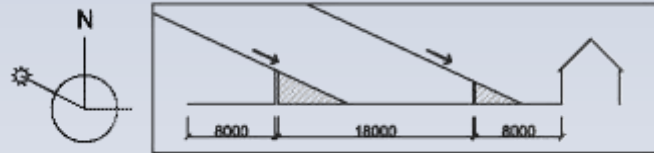
June 21, 3 p.m.



June 21, 3 p.m.



June 21, 8 p.m.



Perspective of the buffer zone between the Saint-Jean substation and the homes on Place des Pins



Information on electromagnetic fields

315/25-kV Saint-Jean substation and 315-kV supply line
construction project in Dollard-Des Ormeaux

Report 326

Bureau d'audiences publiques sur l'environnement (BAPE)

August 2016, p. 50 to 56

www.bape.gouv.qc.ca