



April 27, 2017

**Comments on a proposed “development” plan for the
Anse-à-l’Orme Sector of Pierrefonds**

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I endorse the Common Vision statement (attached).

In this paper I will detail some of the societal, environmental, and monetary costs of Montreal's proposed plan for the Anse-à-l'Orme sector of Pierrefonds and make some recommendations.

Montreal is a champion of urban sprawl. According to Naghmeh Nazarnia, a researcher at Concordia University:

“Urban sprawl on the island of Montreal has increased 29-fold between 1971 and 2011.

Urban sprawl in Montreal has never increased as fast as it has in the last 20 years and is increasing today” (Nazarnia et al, 2016: Accelerated urban sprawl in Montreal, Quebec City, and Zurich: Investigating the differences using time series 1951- 2011. Ecological Indicators, 60, 1229-1251; “Accelerating Urban Sprawl in Montreal and the Need for Change”, presentation to Forum Nature Montréal, April 2016). To express it a different way, the urbanization of the Island has increased far faster than the population has.

Urban sprawl is characterized by longer distances between built-up areas and more occupied space per capita. the PMAD and *Cadre d'aménagement et orientations gouvernementales* recognize the high social, environmental, and financial costs of urban sprawl. That is why their recommendations are to consolidate built up areas, preserve biodiversity, optimize the use of current infrastructure, and reduce dependence on private cars to reduce generation of greenhouse gases.

Unfortunately, the proposed development on the last remaining large natural space on the Island of Montreal goes counter to these objectives. Its design is apparently based on the paradigm that unbuilt land, whatever its present vocation might be, is better used for development. Sadly, this outdated idea has resulted in an increasingly urgent environmental situation.

The relative convenience of a private car compared to public transit on the west island means that despite intermittently severe congestion, eighty percent of residents travel by automobile. According to traffic modeling studies done by Montreal's *Service des Infrastructures, voirie et transports* the lanes on the three major north-south arteries reserved for cars with more than one passenger make up 15 % of traffic. In the studies done on the existing arteries, there were 1.28 occupants per car. *There is nothing to indicate that these figures will change (Note technique: Modélisation, Service des Infrastructures, voirie et transports, 4 May 2016; Note, Service des Infrastructures, voirie et transports, 1 December 2015).*

As Isabelle Maréchal wrote in *Le Journal de Montréal* (April 24, 2017) :

Tant que le transport collectif ne sera pas mieux planifié, les usagers vont se rabattre sur la voiture. Comment améliorer le service et rendre son usage plus sexy? Je ne peux pas croire qu'avec tous nos spécialistes en transport urbain, on n'arrive pas encore à répondre à cette question.

The development proposed for Pierrefonds west will exacerbate this situation.

If there are 6,000 new residences and two cars per household, that would be 12,000 more cars.

To serve this new city to be built on the cool wet meadows of Pierrefonds west, and ostensibly to relieve congestion for existing neighbourhoods in Pierrefonds and Kirkland, the Ville de Montréal has invested in modeling studies for another north-south artery on the “440” right-of-way (belonging to the *Ministère des Transports*) between Gouin Boulevard and the Colisée Kirkland (*op cit*). The engineers predict that even if building the new main artery causes traffic to flow more smoothly for 13 years, after that we will be in the same situation:

Les conditions à l’horizon 2030, telles que simulées ici, ressemblent aux conditions actuelles. Notons la hausse significative des débits enregistrés sur l’autoroute A-40.

More cars can only cause more congestion:

“ le Carrefour giratoire crée un obstacle pour les véhicules circulant sur le chemin Sainte-Marie”; « le giratoire à deux voies à chemin Sainte-Marie peut tout juste accomoder le trafic actuel » .

In their modeling studies, the traffic engineers found that the new north-south artery would be quite congested before the proposed new city on the natural spaces is even completed:

« la capacité routière de l’étape 0 (a main artery with 2 lanes in each direction) ne pourra supporter le développement de Pierrefonds ouest au-delà de 40 % ».

Again, the proportion of cars with more than one occupant and therefore entitled to use the reserved lanes is not expected to increase. Most drivers will be the sole occupant of their car.

Possibly traffic flow could be improved for a few more years with an even wider artery. But we have seen from experience that more fluid traffic flow always attracts more drivers trying to escape congestion elsewhere. Indeed, the traffic study predicts a “domino effect”: the traffic on St John’s boulevard will be lessened because those drivers will switch to St Charles’; the hoped-for relief to drivers on St-Charles’ will not be as expected because of this, even though some drivers have switched from St-Charles’ to the 440.

Traffic congestion is also a problem for the Pierrefonds residents who use Gouin Boulevard and Anse-à-l’Orme Road, especially in the morning rush hour. With another 5-6,000 households in the sector, this is likely to worsen. Anse-à-l’Orme Road is ill-adapted to high-speed traffic, with deep ditches either side. It has been the site of at least four road fatalities in recent years.

Juste Rajaonson of the *École des sciences de la gestion, Université du Québec à Montréal (Analyse des Contraintes, Coûts et Impacts d’un Éventuel Projet Immobilier dans le Secteur Peirrefonds-ouest/Anse-à-l’Orme; rapport présenté à Sauvons l’Anse-à-l’Orme, February 15, 2017)* estimates the cost of the new boulevard at 50 million dollars, to be paid for by the *Ministère des Transports*. In addition, there would be annual costs relating to its upkeep.

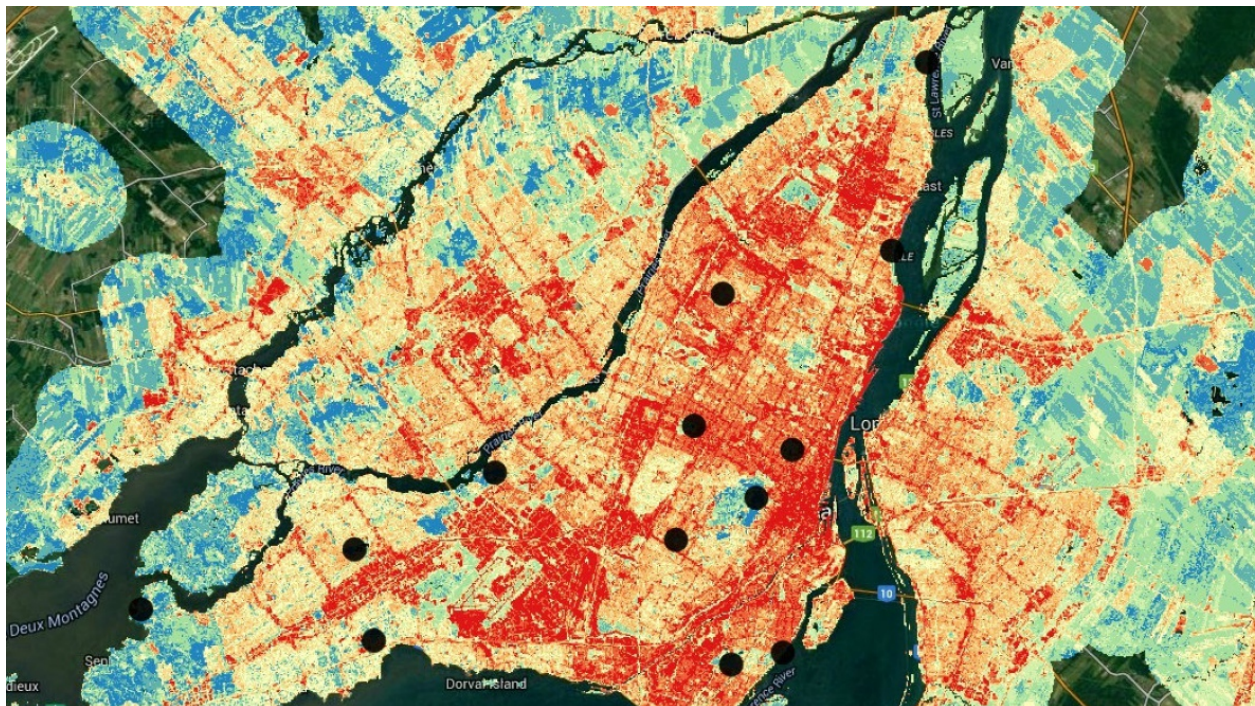
50 M \$ or more of Quebec taxpayers’ money could be spent on an urban boulevard not even adequate to improve traffic fluidity for embattled motorists in the existing neighbourhoods, let alone serve the lucky few who would live on former natural spaces next to Anse-à-l’Orme and Cap-Saint-Jacques Nature Parks.

The development that the Ville de Montréal and the borough of Pierrefonds are promoting is designed in such a way that residents will be dependent on owning a private car for all their mobility needs. For many reasons, including those already stated, this is a paradigm that must change.

Car travel is expensive and by several measures, inefficient. Many cars are parked 90 % of the time. Depending on the model a car can cost as much as 12,000 \$ dollars per year. A household with two people driving to work in a neighbourhood not adequately served by transit could spend twice that amount.

Car emissions cause many sorts of pollution and contribute to global warming. The construction of roads and parking lots also contribute directly to warming as asphalt absorbs heat. Shopping center lots are sized for the number of cars that will park there on the busiest shopping days; the rest of the time they are relatively empty. CBC's web site has a heat map

:(https://www.google.ca/search?q=montreal+heat+map&safe=active&rlz=1C1CHZL_enCA707CA707&tbm=isch&imgil=tNIUW WJJey-47M%253A%253BtV_4gDMgF-BoHM%253Bhttp%25253A%25252F%25252Fwww.cbc.ca%25252Fnews%25252F):



“24 Heures” reported on the 21st of March 2017 : “Avertissement de smog dans la vallée du Saint-Laurent”: that a smog warning was issued by Environment Canada for the St-Lawrence Valley from the Ontario border to Montmagny and that even La Mauricie and La Beauce were included.

As reported by MOBA's analysis of mobility on the West Island, dependence on private cars has a deleterious effect on drivers' health compared to that of transit users. Heat islands and airborne particulates are of course a threat to everyone's health.

Whereas being able to drive a car allows considerable freedom for car owners, car-oriented developments tend to disallow other options such as active transport and transit. Lack of transit is a serious obstacle for those not able to drive or who can't afford to own a car.

Denser neighbourhoods make efficient transit possible. It makes sense to densify around existing transit routes ("TOD's"). Again, the proposed development on what is now a relatively cool part of the island is in exact opposition to this, and previously cited, objectives of the PMAD.

Note that the Conseil régionale de l'Environnement produced an *Analyse du potentiel de développement résidentiel dans l'arrondissement de Pierrefonds-Roxboro* (April 2016, on the OCPM'S web site). There are other sites for housing which would permit the Ville de Montréal to reach its conservation goals.

According to analyst Tony Seba, a market disruption could make private cars obsolete in a very short time (<https://www.youtube.com/watch?v=Kxryv2XrnqM>). A market disruption happens when a widely-used product or service is rapidly supplanted by another which meets the same need. Two of Seba's examples are the replacement of horses with cars and land lines with cell phones.

Tony Seba predicts that private cars will become simply too expensive to own and run. With the advent of autonomous cars, car sharing services, telecommuting, excellent internet service, the renaissance of such companies as Ford and GM into "mobility providers", and the continuing increase in conventional fuel prices, attractive alternatives to owning a car are becoming a reality.

Frustrated commuters in Pierrefonds, Kirkland, and other towns will still need solutions to their rush hour transportation woes; many may be in favour of the new urban boulevard. Should Montreal build the boulevard when their own experts have told them that despite that investment we can expect the same traffic situation in thirteen years?

Perhaps a combination of measures designed to reduce the number of cars at peak hours, such a strong incentives for car-pooling or use of transit, would be preferable and certainly less expensive.

The PMAD and *Cadre d'aménagement et orientations gouvernementales* recognize that the cost of providing infrastructure in a spread-out neighbourhood is prohibitive. Municipal services such as garbage collection, road, aqueduct, and sewer maintenance are much less expensive in high-density neighbourhoods.

In his study, Rajaonson estimates the cost of the proposed development in Pierrefonds west at between 95 and 103 million dollars. The study considers the cost of all infrastructure as well as municipal services such as garbage collection and transit.

The cost of water supply and sewers, domestic and for rainwater, is estimated at 3, 35 to 6, 7 million \$ (based on 670,500 \$ per kilometer; he has used figures from smaller municipalities and the cost of infrastructure in Montreal is often more, so we should consider his estimates as minimal). The final cost of course would depend on the street layout in the eventual proposed development.

Runoff and sewers which overflow in flood situations have caused the Rivière à l'Orme to be highly polluted according to the RUISSO Index (*Bilan environnemental 2015: Portrait de la Qualité des Plans d'Eau à Montréal; Service de l'environnement*). If the proposed 5 – 6 thousand new houses with their

attendant roads, sidewalks, and so on were to be built, more surface runoff could be expected as street surfaces are not permeable. There would also be more contamination by melting salted snow. The cost of protecting and improving the River's water quality, which the city is obliged to do under the *Politique de protection et mise en valeur de milieu naturels*, is unknown. Does the Ville de Montréal hope to restore the Anse-à-l'Orme River to an unpolluted state? The proposed development, whose streets and backyards will drain mostly towards the river, will not contribute to achieving this goal.

What to say about the cost to the future residents of protecting their basements against flooding and their eventual complaints to their municipality? Some municipalities for example, Senneville, have adopted resolutions to limit their liability towards citizens in the event of flooding.

The accompanying photographs show what certain parts of the development area looked like recently:



1: As of April 25th, 2017, the Anse-à-l'Orme Road had been closed for three days due to flooding (above).



2: In the development area about 800 m east of Rivière-à-l'Orme (April 21, 2017)



3: In the development area, April 21, 2017



4: In the development area, April 19, 2017



5: In the development area, April 19, 2017

The development proposal would destroy several wetlands, as the area is sprinkled liberally with them. It would “protect” two, the *Marais Lauzon* and the *Marais 90*. This “protection” may not be adequate to ensure the vigour of the marshes. François Morneau (*Audit écologique (inventaire) de l’avifaune Projet d’aménagement des marais Lauzon et 90*, December 2015; Contrat 15-1509, Ville de Montréal) noted

that the area *around* the *marais 90* was the most significant from a biodiversity point of view. The proposed perimeter around each marsh is very limited; shy marsh birds may not be able to nest there. Also, the water regime could be affected by the drainage necessary for the proposed new development surrounding the marshes, thus causing them to dry out and become invaded with less wet-tolerant plant species. For an example of a dead wetland in the middle of a housing development, visit nearby Héritage sur Le Lac: <https://www.google.ca/maps/@45.4581853,-73.9053794,888m/data=!3m1!1e3>. The Marais 90 is west of the development. Since wetlands are supposed to be protected in Quebec, we might well ask how the MDDELCC allowed the houses and street to be built right next to the marsh. Environmental Impact studies are not available (see “Developer intent on blocking access to studies”, The Gazette, July 30, 2009).

Two of the studies of the ecology of the proposed development area were done by SMi, the firm for which David Cliche works. *Inventaire de la Végétation et Mise au Point du Plan d’Aménagement des Marais Lauzon et 90 dans le Secteur de Pierrefonds-ouest* was submitted to the Ville de Montréal in May 2016. At the time, David Cliche was a lobbyist for several of the speculators who hope to build on the land in Pierrefonds. David Cliche has been convicted of lobbying infractions (<http://www.lapresse.ca/actualites/politique/politique-quebecoise/201603/21/01-4963055-lobbyisme-lex-politicien-david-cliche-reconnu-coupable-dinfractions.php>).

The Ville de Montreal has made many commitments to protecting biodiversity and is proud to be the host city for the Convention on Biodiversity. The former CBD commissioner, Christine Alfsen, considered that the Anse-à-l’Orme corridor had all the necessary attributes to become a world biosphere reserve (see correspondence, Appendix). Many studies and presentations to this commission have described how rich its biodiversity is and how essential to the survival of fauna and flora. The destruction of this habitat in favour of 5-6,000 human residences is of course in direct opposition to the stated goal of protecting biodiversity.

Juste Rajaonson (*op cit*) considered the cost of fencing around the existing nature parks to exclude illicit human activity and access by domestic animals to protect biodiversity within the existing nature parks, which would no longer have a large buffer zone as well as being subject to increased human disturbance. He estimated the initial cost to be 400,000 dollars, plus annual maintenance of 120,000 dollars.

The fields, hedgerows, and forests on which the Ville de Montréal proposes to create its “*cit  nouvelle*” are used by an important local population of White-tailed Deer (possibly as many as 50 animals), whose habitat will be much reduced. The administration should consider how to deal with deer overeating vegetation in the parks and invading people’s backyards (see *Pointe-aux-Prairies: cinq solutions   la surpopulation de chevreuils*, La Presse, 31 mai 2014; also, *Les chevreuils en d clin au parc-nature de la Pointe-aux-Prairies* in *Avenir de l’Est*, 24 novembre 2016).

The destruction of habitat combined with the creation of a new road could result in more deer-vehicle collisions (already a hazard on Anse- -l’Orme Road). Rytwinski et al in *How effective is road mitigation at reducing road-kill? A meta-analysis* (see web site for the Quebec Centre for Biodiversity Science web

site) emphasize that fencing with crossing structures are mostly effective (and expensive). To measure the effectiveness of mitigation measures, however, it is necessary to measure mortality before and after structures have been installed.

Deer are not the only casualties on Anse-à-l'Orme Road although they are the most dangerous for drivers. Rytwinski et al: "Road traffic kills hundreds of millions of animals every year, posing a critical threat to the populations of many species". More cars on the existing Anse-à-l'Orme Road plus a new high-speed road will put existing fragile populations of reptiles, amphibians, and small mammals – several species of which are threatened - at greater risk. Amphibians and reptiles are especially vulnerable because they are attracted to the heat generated by road surfaces.

Scientists and physicians are increasingly aware of the negative effects of light pollution on human and animal health (the Royal Astronomical Society of Canada has published a report on this). Although greater Montreal is severely affected by light pollution, the West Island is relatively dark at night.

Noise pollution is also harmful to human health. The Anse-à-l'Orme corridor is one of the few places on Montreal Island where almost perfect silence can be experienced for a few hours every week.

For there to be access to the precious attributes of dark skies and healing silence, large unbuilt spaces are necessary.

In the context of climate change, air pollution caused by vehicles, and urban sprawl, the contribution of unbuilt natural spaces to collective mental and physical health has great value for the public good.

Biopolis, a joint project of Concertation Montréal and World Wildlife Federation, recognizes the essential role of natural spaces for the health of urban residents (as most Canadians now are) and supports Sauvons L'Anse-à-l'Orme in its efforts to conserve the last large unprotected natural space on the Island of Montreal (<http://www.biopolis.ca/en/projects/sauvons-lanse-lorme/>).

Recently the Borough of L'Île-Bizard Sainte Geneviève adopted a resolution to "*Saisir l'Office de consultation publique de Montréal (OCPM) d'une demande de consultation publique sur la création d'une réserve de biodiversité et de protection contre les gaz à effet de serre*" (resolution CA16 28 0172 of the regular sitting of June 6, 2016).

I will not “*valider et bonifier*” the Ville de Montréal’s plan for replacing the last large natural space on the Island with houses and roads.

I recommend:

1. That the Anse-à-l’Orme sector of Pierrefonds be protected in its entirety.
2. Plans for a fourth north-south artery should be abandoned.
3. A comprehensive plan to ease traffic congestion which does not involve building more roads must be implemented.
4. Montreal must declare an immediate moratorium on all development on green spaces (as called for by the Green Charter (2016) and the Sierra Club moratorium on development (2015))
5. As proposed by the Borough of Ile-Bizard Ste-Geneviève, the OCPM should be mandated to conduct hearings on the creation of a biodiversity reserve in the Anse-à-l’Orme sector.

APPENDIX I

To: [Christine Alfsen-Norodom](#)

Sent: Wednesday, May 20, 2009 2:59 PM

Subject: Pochette d'infos_Parc Ecologique de l'Archipel de Montreal

Hello again Christine

We are excited to have been able to talk to you and to Oliver this morning about the **URBIS** concept. We look forward to collaborating with you in finding ways to make the **Parc Écologique de l'Archipel de Montréal** a reality. The **Urban Biosphere** concept and the concept of the **Parc Écologique de l'Archipel** truly appear to be a match!

We will certainly be sending along more information as this challenging project evolves. In the meantime, we will be nourishing the contacts we have in the academic community, among other initiatives...

Salutations,

David Fletcher and Sylvia Oljemark

Please find information, attached and below, about the **Parc Écologique de l'Archipel de Montréal**.

Objet: Parc Écologique de l'Archipel de Montréal

Une soixantaine d'organismes se sont regroupés en partenariat pour créer le **Parc Écologique de l'Archipel de Montréal**. Le but de cette démarche collective est de sauvegarder au **minimum 12 %** du domaine bioclimatique original de l'érablière à caryer du sud-ouest du Québec. Ce patrimoine naturel est menacé de disparition, alors qu'il recèle la plus grande biodiversité au Québec. Le projet de parc vise ce vaste domaine écologique dont la superficie s'étend des Basses-Laurentides jusqu'à la frontière américaine et du Sûroit à Sorel.

Ce projet d'envergure s'agit de créer une ceinture verte pour Montréal et le sud-ouest du Québec - une ceinture verte de forêts, de milieux humides, de plaines inondables et d'îles, tous reliés par les corridors verts, les ruisseaux et les grandes rivières qui sillonnent le Québec méridional.

Vous trouverez ci-joint des documents relatifs à ce projet innovateur.

Comité, **Partenaires du Parc Écologique de l'Archipel de Montréal (PPÉAM)**

<file:///E:/Anse-à-l'Orme2015/Reports/Forum%20Nature%20Mtl.%20-%20Jaeger%20et%20al.%2016%20April%202016%20slides.pdf>

APPENDIX II

A COMMON VISION FOR THE PRESERVATION OF THE L'ANSE-À-L'ORME CORRIDOR AS A NATURAL SPACE

For presentation to the Office de Consultation Publique de Montréal (OCPM) in its hearings in May 2017 on the proposed Special Planning Program (SSP) for Pierrefonds-West

1. The L'Anse-à-L'Orme Corridor must be entirely preserved in order for the City of Montreal to comply with its own conservation commitment.

The Plan métropolitain d'aménagement et de développement of the Montreal Metropolitan Community (PMAD) requires the protection of 17% of the territory of the CMM.

The Schéma d'aménagement et de développement de l'agglomération de Montréal requires the protection of 10% of the territory of the agglomeration (5,000 hectares).

By its own calculation, Montreal has protected only 6% of the territory of the agglomeration (3,000 hectares), leaving more than 2,000 hectares to be preserved. in order for Montreal to reach its own conservation target.

As only a limited amount of green space remains available on the island, all of it must be preserved, and this obviously includes the 185 hectares of wet meadows in Western Pierrefonds that face elimination through a massive real estate project.

2. The L'Anse-à-L'Orme Corridor is a unique and irreplaceable haven of biodiversity that should be preserved on its own merits:

3. The proposed development contemplated in the proposed PPU is a bad deal for the taxpayers of Pierrefonds-Roxboro and the City of Montreal:

4. The proposed development is in the wrong place and should be relocated in order to comply with the City of Montreal's own principles of sustainable development:

5. The mandate given by the City of Montreal compromises the OCPM's independence and neutrality:

The brochure for these hearings invites the public "to come validate and improve the vision" of the proposed development, while at the same time stating that the "OCPM was created specifically to ensure that certain public consultations in Montreal are led by a neutral and independent organization." Given that the issue of greatest concern to the public is whether or not the L'Anse-à-L'Orme Corridor should be developed at all, the OCPM's independence and neutrality are compromised by its very terms of reference.

The OCPM is asked to recommend to the City of Montreal that future OCPM mandates explicitly address the issue of conservation first, and the details of actual development scenarios second.

