

**8. AIRPORT AND AIRCRAFT NOISE: OFFICIAL PLAN, ZONING AND ENVIRONMENTAL NOISE CONTROL GUIDELINES**

**BRUIT ASSOCIÉ AUX AÉROPORTS ET AUX AÉRONEFS : POLITIQUES DU PLAN OFFICIEL ET DU RÈGLEMENT DE ZONAGE, ET LIGNES DIRECTRICES SUR LA LUTTE CONTRE LE BRUIT ENVIRONNEMENTAL**

**COMMITTEE RECOMMENDATIONS**

That Council approve amendments to:

1. Annex 10 of the Official Plan to replace the existing 35 Noise Exposure Forecast / Noise Exposure Projection contour with a new composite 35 Noise Exposure Forecast /Noise Exposure Projection composite noise contour as illustrated in Document 1;
2. Section 4.8.6 of Volume 1 of the Official Plan, as detailed in Document 2;
3. Section 70 and Schedule 6 of the Zoning Bylaw, as detailed in Document 3; and
4. the Environmental Noise Control Guidelines as detailed in Document 4.

**RECOMMANDATION DU COMITÉ**

Que le Conseil approuve :

1. les mises à jour à l'annexe 10 du Plan officiel visant à remplacer la courbe 35 des prévisions et des projections d'ambiance sonore par la nouvelle courbe composite 35 des prévisions et des projections d'ambiance sonore illustrée dans le document 1 ;
2. les modifications à article 4.8.6, Volume 1 du Plan officiel, comme le décrit en détail le document 2 ;

3. **les mises à jour à l'article 70 et à l'annexe 6 du Règlement de zonage, comme le décrit en détail le document 3 ; et**
4. **les modifications aux Lignes directrices de la Ville sur la lutte contre le bruit environnemental approuvées par le Conseil, comme le décrit en détail le document 4.**

DOCUMENTATION/DOCUMENTATION

1. Director's report, Economic Development and Long Range Planning, Infrastructure and Economic Development Department, dated 28 June 2017 (ACS2017-PIE-EDP-0018)  
  
Rapport du Directeur, Développement économique et Planification à long terme, Direction générale de la planification, de l'infrastructure et du développement économique, daté le 28 juin 2017. (ACS2017-PIE-EDP-0018)
2. Extract of draft Minutes, Planning Committee, 11 July 2017  
  
Extrait de l'ébauche du procès-verbal, Comité de l'urbanisme, le 11 juillet 2017

**Rapport au:**

**Planning Committee / Comité de l'urbanisme  
July 11, 2017 / 11 juillet 2017**

**and Council / et au Conseil  
August 23, 2017 / 23 août 2017**

**Submitted on June 28, 2017  
Soumis le 28 juin 2017**

**Submitted by**

**Soumis par:**

**John Smit,**

**Director / Directeur**

**Economic Development and Long Range Planning / développement économique  
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**Ward: CITY WIDE / À L'ÉCHELLE DE LA VILLE      File Number: ACS2017-PIE-EDP-0018**

**SUBJECT: Airport and Aircraft Noise: Official Plan, Zoning and Environmental  
Noise Control Guidelines**

**OBJET: Bruit associé aux aéroports et aux aéronefs : politiques du Plan  
officiel et du Règlement de zonage, et Lignes directrices sur la lutte  
contre le bruit environnemental**

## **REPORT RECOMMENDATIONS**

**That Planning Committee recommend Council approve amendments to:**

- 1. Annex 10 of the Official Plan to replace the existing 35 Noise Exposure Forecast / Noise Exposure Projection contour with a new composite 35 Noise Exposure Forecast /Noise Exposure Projection composite noise contour as illustrated in Document 1;**
- 2. Section 4.8.6 of Volume 1 of the Official Plan, as detailed in Document 2;**
- 3. Section 70 and Schedule 6 of the Zoning Bylaw, as detailed in Document 3; and**
- 4. The Environmental Noise Control Guidelines as detailed in Document 4.**

## **RECOMMANDATIONS DU RAPPORT**

**Que le Comité de l'urbanisme recommande au Conseil d'approuver :**

- 1. les mises à jour à l'annexe 10 du Plan officiel visant à remplacer la courbe 35 des prévisions et des projections d'ambiance sonore par la nouvelle courbe composite 35 des prévisions et des projections d'ambiance sonore illustrée dans le document 1;**
- 2. les modifications à article 4.8.6, Volume 1 du Plan officiel, comme le décrit en détail le document 2;**
- 3. les mises à jour à l'article 70 et à l'annexe 6 du Règlement de zonage, comme le décrit en détail le document 3; et**
- 4. les modifications aux Lignes directrices de la Ville sur la lutte contre le bruit environnemental approuvées par le Conseil, comme le décrit en détail le document 4.**

## **EXECUTIVE SUMMARY**

This report recommends that and the City adopt a series of updates and refinements to mapping and policies in the Official Plan, Zoning By-Law and in the Council approved Environmental Noise Control Guidelines with respect to land use planning and airport and aircraft noise. These changes, although they do not change land use permissions in the vicinity of airports are being made to make necessary updates and improve, clarify and streamline land use planning in the vicinity of airports. The amendments and

updates continue to ensure the long term economic viability of airports in the City as required by Provincial Policy Statement.

### **Assumption and Analysis**

The impact of aircraft noise on lands in the City are modelled periodically by the MacDonald-Cartier International Airport Authority. In early 2016 the MacDonald-Cartier International Airport received verification from Transport Canada for noise modelling projections through to the year 2043. City staff are recommending, with the support of the Macdonald-Cartier International Airport Authority, some minor changes to the airport noise mapping as a result of this update to the year 2043. Specifically, a new composite 35 NEF/NEP noise contour is recommended to be used on Annex 10 of the Official Plan to replace the existing 35 NEF/NEP noise contour. The remaining noise contours (The Airport Vicinity Development Zone, the 25 NEF/NEP composite noise contour and Airport Operating Influence Zone) have been corroborated by the 2043 mapping and do not require modification.

Staff are also recommending necessary updates and streamlining of Official Plan policies, Zoning provisions and the Environmental Noise Control Guidelines. These changes are consistent with the approach taken by Council in its approval of updates and streamlining to Environmental Noise policies in 2016 (see ACS2015-PAI-PGM-0025 – Official Plan Amendment 167). The effect of these updates and changes will not make land use policies more restrictive in the vicinity of airports in the City; rather the effect will be easier interpretation of Provincial and Federal policies and to greater clarify the requirements for noise studies or mitigation of aviation noise.

### **Financial Implications**

There are no direct financial implications.

### **Public Consultation/Input**

Consultation on proposed amendments was completed in accordance with the City's public consultation guidelines. Proposed direction was posted on the Development Applications (“devapps”) web page in November 2016 following standard newspaper advertising. Circulation was also completed to all community associations, development industry associations and, where recommended by Councillors, individual landowners.

## **RÉSUMÉ**

Le présent rapport recommande l'adoption par la Ville d'une série de mises à jour et de précisions à la cartographie et aux politiques du Plan officiel et du Règlement de zonage, ainsi qu'aux Lignes directrices sur la lutte contre le bruit environnemental relatives à la planification de l'utilisation du sol et au bruit associé aux aéroports et aux aéronefs. Ces modifications, bien qu'elles ne changent en rien les autorisations d'utilisation du sol à proximité des aéroports, sont apportées pour faire les mises à jour nécessaires et pour améliorer, clarifier et rationaliser la planification de l'utilisation du sol autour des aéroports. Les modifications et les mises à jour effectuées continuent d'assurer la viabilité économique à long terme des aéroports de la ville, comme l'exige la Déclaration de principes provinciale.

### **Hypothèse et analyse**

Les répercussions du bruit des aéronefs sur les terrains de la Ville sont modélisées périodiquement par l'Administration de l'aéroport international MacDonald-Cartier. Au début de 2016, l'Administration de l'aéroport international MacDonald-Cartier a fait l'objet d'une vérification par Transports Canada des prévisions de modélisation du bruit d'ici à 2043. Le personnel de la Ville recommande, avec le soutien de l'Administration de l'aéroport international MacDonald-Cartier, certains changements mineurs à la cartographie du bruit de l'aéroport, qui feraient suite à cette mise à jour, jusqu'en 2043. Plus précisément, l'utilisation d'une nouvelle courbe de bruit en composite NEF/NEP 35 est recommandée pour l'annexe 10 du Plan officiel, en remplacement de la courbe de bruit NEF/NEP 35 actuelle. Les autres courbes de bruit (zone d'aménagement dans le voisinage d'un aéroport, la courbe de bruit en composite NEF/NEP 25 et la zone sous l'influence de l'exploitation d'un aéroport) ont été confirmées par la cartographie valide jusqu'en 2043 et ne requièrent aucune modification.

Le personnel recommande également d'apporter les mises à jour et la rationalisation nécessaires des politiques du Plan officiel, des dispositions du Règlement de zonage et des Lignes directrices sur la lutte contre le bruit environnemental. Ces modifications sont conformes à l'approche adoptée en 2016 par le Conseil en matière d'approbation des mises à jour et d'harmonisation des politiques relatives au bruit environnemental (se reporter à ACS2015-PAI-PGM-0025 – Modification 167 au Plan officiel). Ces mises à jour et ces modifications n'auront pas pour effet de rendre les politiques d'utilisation du sol plus restrictives à proximité des aéroports de la ville, mais faciliteront plutôt l'interprétation des politiques provinciales et fédérales, et clarifieront les exigences en matière d'études sur le bruit ou d'atténuation du bruit lié à l'aviation.

### **Répercussions financières**

Il n'y a aucune répercussion financière directe.

### **Consultation publique et commentaires**

La consultation relative aux modifications proposées a été effectuée conformément aux directives de la Ville sur la consultation publique. L'orientation proposée a été affichée sur la page Web des demandes d'aménagement (« demdam ») en novembre 2016, après la période habituelle d'annonce dans les journaux. Une diffusion de cette information a également été effectuée auprès de toutes les associations communautaires et du secteur de l'aménagement. Ces modifications ont par ailleurs été recommandées par des conseillers municipaux et des propriétaires de la ville.

### **BACKGROUND**

On November 27, 2013, Council directed staff to review the regulatory framework and current practices with respect to the Environmental Noise Control Guidelines (ENCG) and to update city guidelines and streamline the application and review process for noise studies (Ref N°: ACS2013-CMR-PLC-0011). A subsequent report (2014) provided specific direction to Section 4.8.7 of the Official Plan dealing with streamlining of noise policies and the review and approval process for transportation and stationary noise sources. Updates and streamlining of environmental noise policies dealing with stationary and transportation noise and the Environmental Noise Control Guidelines was approved by Council in early 2016 (ACS2015-PAI-PGM-0025 – Official Plan Amendment 167). This report, in addition to noise mapping, addresses updates and streamlining of noise policies relating to aircraft and aviation noise.

Unlike surface transportation and stationary noise, the basis for application of land use policies and noise studies around the airports in the Official Plan is not estimated by a guideline distance, nor can it be measured independently. Noise around airports and aircraft in Canada are spatially modelled using Transport Canada's Noise Exposure Forecast /Noise Exposure Projection (NEF/NEP) methodology. The Official Plan currently utilizes the results of modelling predicting growth of aviation activity to the year 2023 and this is illustrated on Schedule K. Further refinement of the 2023 NEF/NEP lines is found on the accompanying Annex 10 and again in Schedule 6 of the Zoning Bylaw. Shortly following approval of OPA 167 the MacDonald-Cartier International Airport Authority completed an update to noise exposure modelling for its runways to the year 2043.

The primary purpose of this report is to update the noise contour boundaries around the airport as they are illustrated in the Official Plan and Zoning By-law. An additional purpose of this report is to complete a fulsome review, update and streamlining of Official Plan policies, zoning and guidelines with respect environmental noise arising from aviation noise.

## **DISCUSSION**

The Ottawa Macdonald-Cartier International Airport Authority (OMCIAA) is a significant economic generator for the National Capital Region and is an important contributor to both the provincial and national economies. The international airport, which operates 24 hours a day, every day of the year, links Ottawa to major Canadian and American cities and international destinations and is also a vital connection to northern communities. Ottawa's international businesses and organizations importing and exporting out of Canada are all heavily reliant on the success and growth of aviation services. The Shared Vision for Ottawa's Economic Development (a partnership between the City of Ottawa and the Ottawa Macdonald-Cartier International Airport Authority) notes that 4.5 million passengers use the airport each year and the economic impact of the MacDonald-Cartier International Airport is \$1.1 billion annually and growing (ACS2012-CMR-OCM-0005).

A key incentive to aviation-related business growth is the status of the MacDonald-Cartier International Airport as the largest airport in Canada that does not have limitations to aircraft movements during night-time hours. This enviable competitive status is due in large part to the continued successful application of land use policies prohibiting incompatible noise sensitive development where it could conflict with the airport in the long term.

The City also has two smaller airports without control towers (known as Aerodromes in federal legislation) that allow for growth in civil aviation. They are the Carp Airport and the Rockcliffe Airport at the Canadian Aviation and Space Museum. Historically these airports played an important role in military aviation. This role has declined but these airports remain significant as smaller runways within the nation's capital and both have active civil aviation clubs. In this regard the smaller general aviation runways at MacDonald Cartier are also important and warrant protection from incompatible development in the long term.

In recognition of the critical role of the aviation economy, the City, the Province and the Federal Government have put in place policies to protect airports from incompatible



development and to protect the safety and security of air travel. The long term viability of airports and aviation noise policies are addressed in a number of city documents. This includes provisions in the Official Plan, the Zoning By-law, Annexes of the Official Plan, and the Environmental Noise Control Guidelines.

This report addresses changes to NEF/NEP mapping as a result of the MacDonald-Cartier International Airport Authority's 2043 update to noise exposure modelling. This report also recommends changes and streamlining of Official Plan policies, Zoning By-law provisions and the Environmental Noise Control Guidelines consistent with the approach used for surface transportation and stationary noise policies in 2016 (see ACS2015-PAI-PGM-0025). The changes are intended to provide a more streamlined planning and development process in the vicinity of airports in the City. In each subheading below each of the amendments is discussed and described.

### **Update to Annex 10 of the Official Plan**

Annex 10 of the Official Plan is not a formal part of the Official Plan. The Annex is provided as information to help apply policies in the Official Plan and regulations in the Zoning By-law. Amendments to Annex 10 are completed through Council approval.

The Official Plan Annex 10 currently illustrates four concentric noise contour areas around the MacDonald-Cartier Airport. From outermost to innermost they are:

- The Airport Vicinity Development Zone (AVDZ);
- The NEF/NEP 25 composite noise contour;
- The Airport Operating Influence Zone (AOIZ); and
- The NEF/NEP 35 noise contour.

Based on the relative distance from the airport and beneath flight paths, each of the successive composite contour areas has fewer restrictions to building and development because of the approximated noise levels from aircraft. The definition of each contour line is particularly important for planning and development purposes because noise-sensitive land uses are prohibited or limited based on proximity to airport runways and flight paths.

Of the four lines, three are currently shown as composite lines on Annex 10 (the AVDZ, 25 NEF/NEP and the AOIZ). Composite lines are derived from the modeled noise contour where the line has been adjusted based on the most restrictive of the NEP and

NEF and with recognition of existing natural and built features, historical and current land tenure and property boundaries. The AVDZ is slightly different as it is a composite line that incorporates the take-off, approach, strip, outer and transitional surfaces as well as the bird hazard zone as it is defined in the Federal Ottawa MacDonald-Cartier International Airport Zoning Regulations (2010).

Practice has shown that composite lines have very practical application in land use planning because the boundaries are readily interpreted and applied by the City, agencies, the Airport, the development industry and the public. They have also been shown to allow for better success in long term land use decision making. Evidence of this is that review of the 2043 NEF/NEP modelling showed that the existing 2023 composite lines do not require refinement. The proposed composite NEF/NEF 35 noise contour incorporates, like the other composite lines, a variety of factors as noted above.

In November 2016, the draft composite NEF/NEP 35 noise contour was released through a standard public and technical circulation. Two areas of existing residentially zoned lands were incorporated and both were objected to by residents.

The first, centred on Mary and Lennon Drive in Ward 10 – Gloucester Southgate and affected by the general aviation runways, generated vigorous opposition. Following discussion with the Ward Councillor, residents and airport authority these lands were excluded. The rationale for this removal is, in part, because further building through severance or infill was determined not to be possible given zoning and Official Plan policies.

The second objection to the proposed 35 composite NEF/NEP contour was in the Rideau Glen community area – an area beneath the busiest airport flight-path. This objection was partially resolved by fine-tuning the composite boundary on properties that are only partially impacted by the 35 NEF/NEP line. Because of the volume of flights, notably at night-time and by large commercial aircraft, the Airport Authority has recommended that two properties remain in the composite area.

The 35 NEF/NEP noise contour is the last of the noise restricted areas to be reviewed comprehensively to form a composite line. Unless dramatic alternations to flight paths or flight volumes are experienced prior to 2043, staff are of the opinion that the 35 NEF/NEP composite line will be able to be used for many decades in the future for land use decision making.

### **Amendments to the Official Plan**

Under the Provincial Policy Statement (Policy 1.6.9.2) the City has specific responsibility to protect the long-term operation and economic role of airports by prohibiting incompatible development above the 30 NEF/NEP, and only allow infilling of sensitive land uses where there will be no negative impacts on the long-term function of the Airport. The Provincial Policy Statement (Policy 1.2.6.1) also directs the City to address land use compatibility by ensuring that sensitive land uses (such as residential) are appropriately designed, buffered and separated to prevent or mitigate adverse effects of noise and other contaminants, to minimize the risk to public health and safety, and ensure the long-term viability of major facilities, such as the airport.

The current Official Plan completes the complex task of bringing together federal regulations, airport noise modelling, provincial planning policy and provincial guidelines in addition to municipal Official Plan policies and zoning. A criticism of the existing policy section is that it is too lengthy and somewhat difficult to interpret. The proposed amendments to Section 4.8.6 of the Official Plan feature a shorter and more concise preamble and policy direction. The amendments trim much of the preamble and refine policies to make their interpretation and application clearer, as well as to help streamline the application and review process. A new figure is also proposed to be added to Section 4.8.6 for information purposes, and is intended to explain in simple terms, where certain policy restrictions and study requirements are in place.

Proposed amendments to the Official Plan and further rationale are attached to this report as Document 2.

As required, the amendments are consistent with the 2014 Provincial Policy Statement.

### **Amendments to the Comprehensive Zoning By-law**

Section 70 of the Comprehensive Zoning By-law sets out provisions for development on lands within proximity of airports in the City. The proposed amendments to Section 70 proposed (see Document 3) are limited to necessary changes to update outdated references to external guidelines and legislation.

Schedule 6 in the Zoning by-law illustrates where zoning restrictions apply in the vicinity of the MacDonald-Cartier International Airport. In Official Plan Amendment 76 the Airport Vicinity Development Zone was updated on Schedule K of the Official Plan. Although the Ontario Municipal Board approved the OPA 76 amendments several years ago, the necessary update to Schedule 6 has not yet been completed. This amendment

replaces Schedule 6 of the Zoning By-Law to be consistent with the boundaries as approved in OPA 76.

The revised Schedule 6 is provided in Document 4 of this report.

### **Amendments to the Environmental Noise Control Guidelines**

The Part 1 Section 4.0 of the Environmental Noise Control Guidelines deals with noise studies due to aircraft noise and potential mitigation. When the Environmental Noise Control Guidelines was updated by Council in 2016 the existing section was updated with contemporary references but was left largely unchanged. The proposed amendments, like those made to other sections in 2016, seek to update outdated references and streamline the requirements and approval process for aircraft noise studies. The goal of the amendments is to be no more restrictive or permissive than the existing document.

There are two areas where tangible changes are recommended.

The first recommended change is to add glossary definitions for a Noise Sensitive Commercial Purpose Building and a Noise Sensitive Institutional Purpose Building. These two definitions are consistent with the provincial guideline (NPC-300) although the definition of a Noise Sensitive Institutional Purpose building includes further clarification that a place of worship in commercially or industrially zoned lands is not considered noise sensitive with respect to stationary noise emanating from commercial or industrial uses.

The second area of change is to warning clauses for aircraft noise. The proposed clauses are more strictly worded and refer to buildings rather than units. In addition, there is a new warning clause for any new building within the 35 NEF/NEP composite noise contour.

### **RURAL IMPLICATIONS**

Lands affected by the amendment to Annex 10 are not within the rural area. Other amendments to the Official Plan, Zoning By-law and Environmental Noise Control Guidelines do not place additional restrictions or requirements in the rural area.

## **CONSULTATION**

Consultation on proposed amendments to the Official Plan, Zoning By-law and Environmental Noise Control Guidelines have been completed in accordance with the City's public consultation guidelines.

The proposed direction for changes to the Official Plan and other documents was posted on the City of Ottawa's Development Applications ("devapps") web page in November 2016 following standard newspaper advertising. Circulation was also completed to all community associations, development industry associations and, where recommended by Councillors, individual landowners.

In addition to the circulation, there was a substantial number of meetings and correspondence with stakeholders over the course of the study period including the development industry, community associations, real estate agents and affected land owners. Comments from stakeholders were reviewed, addressed as appropriate, and incorporated into the final versions of the documents.

Comments received during the consultation were generally supportive; however, a small neighbourhood southwest of the Macdonald-Cartier general aviation runway objected strenuously to inclusion into the 35 composite noise contour. With the assistance of the Ward Councillor and Airport Authority, this objection was resolved. The Rideau Glen Community Association also expressed concerns regarding three properties being added to the 35 NEF/NEP composite line. This concern was partially addressed; however, the Airport Authority advises that two of the properties closest to the flight path must remain within the 35 composite noise contour. The two individual land owners were contacted directly and following discussions a single objection was resolved.

No additional specific concerns were raised by land owners, developers or partner agencies to proposed changes to Official Plan or Zoning By-law amendments.

## **COMMENTS BY THE WARD COUNCILLORS**

Each of the four Ward Councillors affected by changes to the 35 NEF/NEP mapping have been notified and are aware of the recommendations of this report.

Ward 10, Councillor Diane Deans, provided the following comments:

"I am aware of the contents of the report and am pleased to see that following the public meeting the community's feedback was acknowledged and reflected in the final recommendations."

Ward 20, Councillor George Darouze, provided the following comments:

“I have been informed that the 35 NEF/NEP composite noise contour will not be significantly changed, and I am comfortable with the revisions to the Airport and Aircraft Noise Guidelines.”

### **LEGAL IMPLICATIONS**

There are no legal impediments to approving the recommendations contained in the report.

### **RISK MANAGEMENT IMPLICATIONS**

There are no risk implications.

### **FINANCIAL IMPLICATIONS**

There are no direct financial implications.

### **ACCESSIBILITY IMPACTS**

This report does not have accessibility implications.

### **TERM OF COUNCIL PRIORITIES**

This report addresses the following Term of Council Priorities:

- Economic Prosperity;
- Healthy and Caring Communities;
- and Planning and Decision-Making.

### **SUPPORTING DOCUMENTATION**

Document 1 Proposed Official Plan Annex 10

Document 2 Proposed Amendments to the Official Plan

Document 3 Proposed Amendments to the Comprehensive Zoning By-law Section 70 and Schedule 6

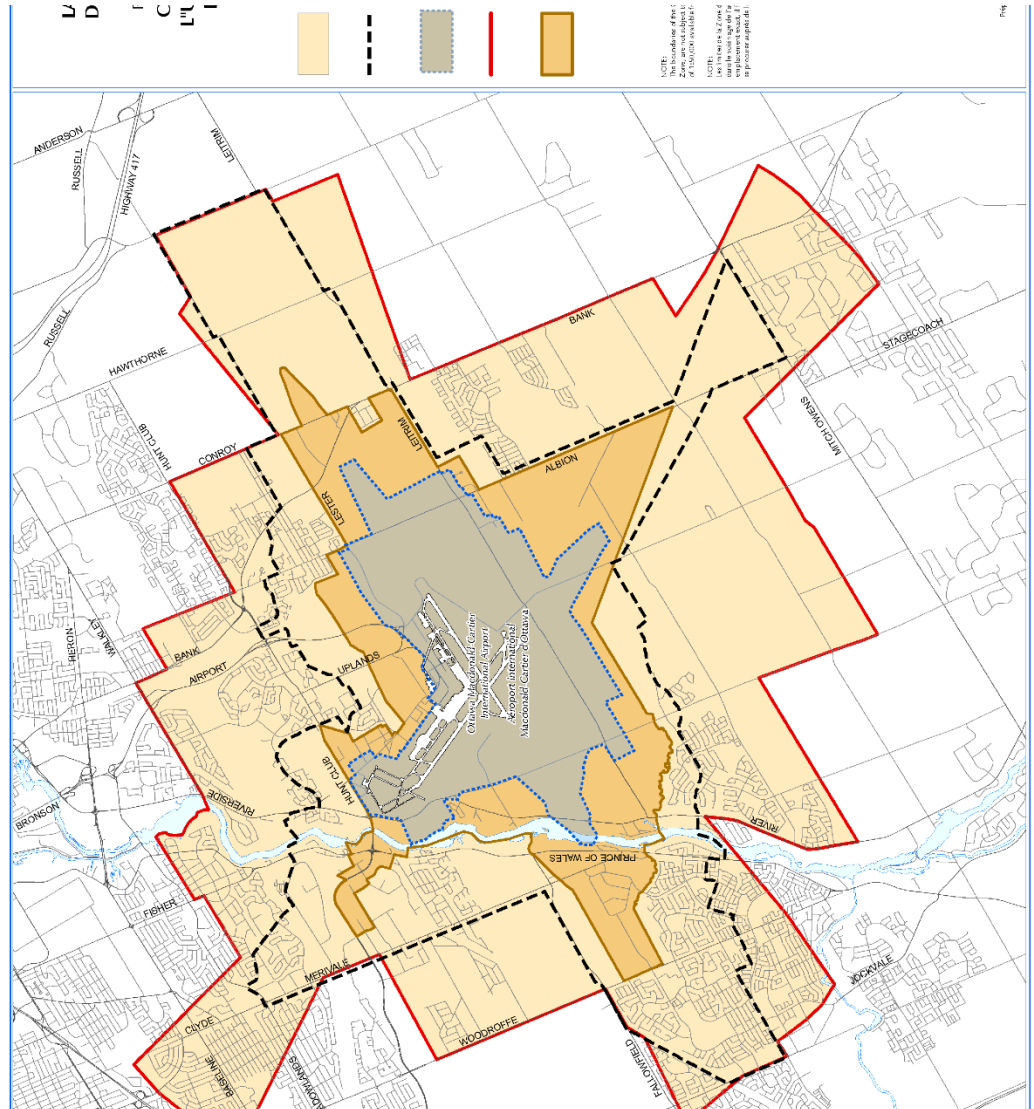
Document 4 Proposed changes to the Environmental Noise Control Guidelines

**DISPOSITION**

Planning, Infrastructure and Economic Development Department to prepare the implementing by-laws, forward to Legal Services and undertake the statutory notification.

Legal Services to forward the implementing by-laws to City Council.

Document 1 – Amended Official Plan Annex 10





Document 2 – Proposed Amendments to the Official Plan



AMENDMENT TO THE  
OFFICIAL PLAN

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## **PART A – THE PREAMBLE**

### **Purpose**

The purpose of these amendments is to:

- Amend Section 4.8.6 of the Official Plan to streamline airport noise policies, and
- add a new figure for information purposes illustrating noise areas and land use restrictions.

### **Location**

The Official Plan Amendment (file number D01-01-16-0011) affects new development and redevelopment in proximity to the MacDonald-Cartier International Airport as well as the Rockcliffe and Carp Airports. Airport areas are shown on Schedule K and Annex 10 of the Official Plan and on Schedule 6 of the Comprehensive Zoning By-law.

### **Basis**

Section 4.8.6 of the Official Plan provides a policy framework for land use constraints due to noise from aviation and aviation-related activities. Under the Plan, policies for noise sensitive land uses such as residential become progressively more restrictive in areas of higher NEF/NEP where aircraft operate at lower altitudes, such as near the airport and underneath flight paths near the runways.

Airport policies in the Official Plan were initially established by the former Region and later incorporated into the new City Official Plan in 2003. Since that time some minor amendments have been made in OPA 36, OPA 76 and in OPA 150.

Proposed amendments to Section 4.8.6 are generally limited to changes that update policies to make them align with current legislation and streamline language to provide greater clarity of when and where land use restrictions may apply. Within the existing Section 4.8.6 there is a substantive preamble as well as text explaining the NEF/NEP modelling process. This text is considered superfluous because the information is generally strategic in origin or is repeated in the City's Environmental Noise Control Guidelines (another Council-adopted document).

The proposed changes to section 4.8.6 would remove the definition of a noise sensitive land use from the preamble, and thus the City would largely rely on the provincial Environmental Noise Guideline (NPC-300) definitions which are proposed to be added and amended in the City's Environmental Noise Control Guidelines.

To aid in the understanding of the complex provisions affecting development a new figure is proposed to be included in Section 4.8.6. The figure will make it easier to understand if and where airport noise policies in the Official Plan apply. Because it is a simplification of the Official Plan policies, the figure will be provided with a note stating that it is for information purposes only and that policies in the Plan are determinative in the event of a conflict.

Consistent with the requirements of the Airport Zoning Regulations and the airport wildlife management plan, a new policy is proposed that prohibits new open water habitat areas within the AVDZ. The concern arising from open water habitat is that use by waterfowl could result in dangerous interactions with aircraft. By providing for a definition of open water habitat (versus open water) some features may be permitted such as stormwater management ponds and gravel pits if design considerations to exclude waterfowl and other birds are used. Staff considered various spatial area alternatives for inclusion in the policy but have ultimately not recommended a maximum habitat area because this could conflict with stormwater management and would preclude consideration of mitigation to discourage wildlife. New open water areas therefore will need to be assessed for potential wildlife use.

Finally, within the Glossary section of the Official Plan definitions of the Airport Vicinity Development Zone (AVDZ) and Airport Operating Influence Zone (AOIZ) are proposed to be added. These definitions formerly resided in the preamble to Section 4.8.6 but are more appropriately found in the Glossary.

## **PART B – THE AMENDMENT TO THE OFFICIAL PLAN**

### **Introduction**

All of this part of this document entitled Part B – The Amendment, consisting of the following text, constitutes Amendment No. XX to the City of Ottawa Official Plan.

### **Details**

The following changes are hereby made to the City of Ottawa Official Plan:

- a) In Volume 1 Section 4.8.6 – Land-Use Constraints Due to Airport and Aircraft Operations remove all text and replace with the following:

#### **4.8.6 Land-use Constraints Due to Airport and Aircraft Operation**

The Ottawa Macdonald-Cartier International Airport is fundamental to the economic well-being of the City, National Capital Region, the Outaouais and Eastern Ontario by providing a full-service, round-the-clock, commercial aviation passenger terminal, airfield system and cargo shipping as well as aviation related businesses and research and development facilities. This plan seeks to ensure the role and function of the Airport is maintained by:

- Prohibiting new noise-sensitive uses within the Airport Operating Influence Zone (AOIZ) as illustrated on Schedule K or Annex 10;
- Implementing the Shared Vision for Economic Development between the City of Ottawa and the Ottawa Macdonald - Cartier International Airport Authority;
- By ensuring appropriate noise reduction measures are integrated into any new proposed residential or other noise sensitive development between the 25 NEF/NEP and 30 NEF/NEP contours;
- Encouraging aviation-based shipping, industry and research to locate in proximity to the airport
- Controlling building heights and natural vegetation within the airport obstacle limitation surfaces as established by federal standards or airport zoning regulations;
- Regulating land uses and activities in a manner that will not increase wildlife presence and elevate risks to aviation operation; and
- Restricting land uses, activities and the use of building materials that have potential to interfere with the performance of navigation aids and telecommunication.

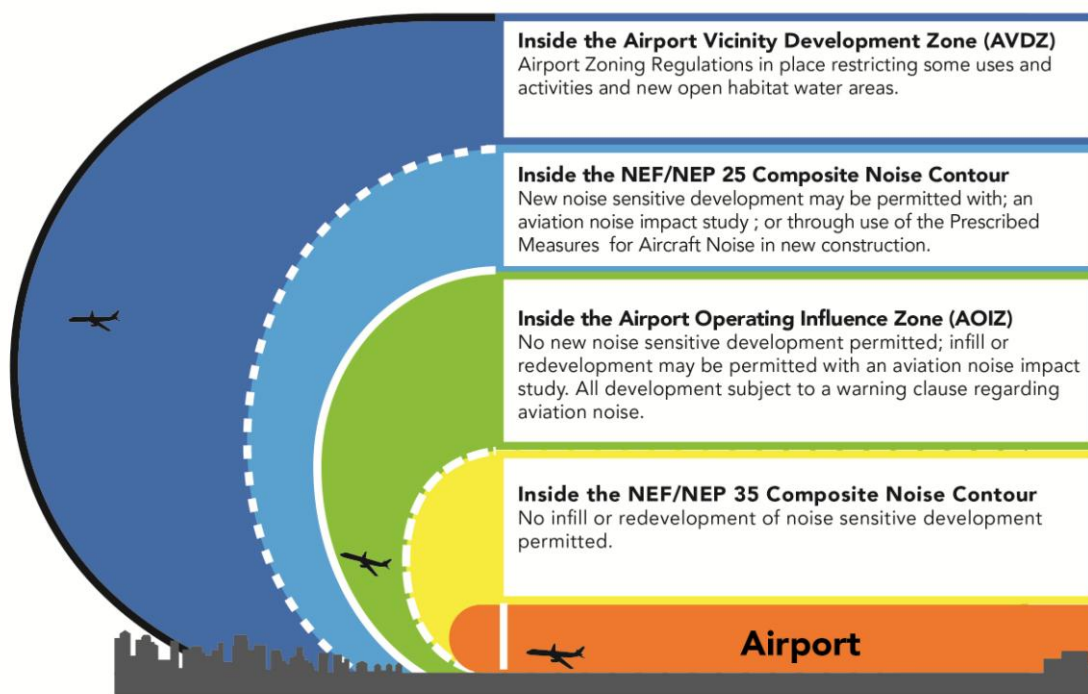
### **Ottawa Macdonald-Cartier International Airport Operational Conditions**

Transport Canada and Airport Authorities across Canada identify areas around airports that require protection. These areas are defined by noise exposure forecasts and projections, (noise contours), Airport Zoning Regulations, the Ministry of Environment Environmental Noise Guideline -

Stationary and Transportation Sources - Approval and Planning (NPC-300), and two federal publications referred to as TP 312 titled Aerodrome Standards and Recommended Practices and TP 1247 titled Land Use in the Vicinity of Airports. For the Ottawa Macdonald-Cartier International Airport, the 2013 NEF contours, the 2023 NEP contours and the Ottawa Airport Zoning Regulations have been used in this Plan to identify two zones around the airport that are affected by aviation operations: the 'Airport Operating Influence Zone' (AOIZ); and the 'Airport Vicinity Development Zone' (AVDZ). These contours have also been corroborated through the 2043 NEP contours.

The impacts of airport operations on land use typically result in three categories of constraints on development: aircraft noise; airport zoning regulations; and wildlife management. Policies in this plan relating to development around the Ottawa Macdonald-Cartier International Airport are summarized in Figure 4.8.6 below.

**Figure 4.8.6 a summary of aviation noise control areas and land use restrictions in the vicinity of the MacDonal-Cartier International**



**Airport (for information purposes only).**

### **General Aviation Airfields**

General aviation airfields at the Ottawa Macdonald-Cartier International, Carp, and Rockcliffe airports contribute to economic development, tourism and recreation within the City by providing facilities that accommodate the Canada Aviation and Space Museum / Musée de l'aviation et de l'espace du Canada, private aviation, flight schools and aviation related businesses. Activities at these airfields will be protected from incompatible development.

### **Policies**

#### **OTTAWA MACDONALD-CARTIER INTERNATIONAL AIRPORT**

Within lands identified as the Airport Vicinity Development Zone (AVDZ) and Ottawa Airport Operating Influence Zone (AOIZ) on Schedule K or Annex 10 the following policies will apply:

1. Development within the AVDZ must take into consideration the Council- approved Environmental Noise Control Guidelines and applicable provincial and federal guidelines and regulations.
2. Within the AOIZ new noise-sensitive land uses will not be approved except where all the following circumstances are met.
  - a. Redevelopment of an existing noise-sensitive land use may be permitted if:
    - i. the land fronts on an existing public road that is maintained year round;
    - ii. the land is on a lot that was created under the Planning Act prior to May 14, 2003;
    - iii. the land use is permitted in the Zoning By-law;
    - iv. appropriate warning clause(s) are included on title to advise purchasers or occupants of expected noise levels and the necessity of installing and maintaining recommended noise control measures; and
    - v. the development is not at or within the 35 NEF/NEP composite noise contour line.
  - b. Infill of residential uses may be permitted if the development:
    - vi. is for a single detached dwelling(s) on a lot(s) created by severance;
    - vii. a detailed noise study is prepared detailing architectural measures necessary and demonstrating that provincial noise guidelines for interior spaces can be met;
    - viii. the infill development fronts on an existing public road that is maintained year round;
    - ix. meets the requirements of the Zoning By-law and all the provisions of this Plan;



- x. appropriate warning clause(s) be included on title to advise purchasers or occupants of expected noise levels and the necessity of installing and maintaining noise control measures;
  - xi. the development does not require a Zoning By-law amendment to create the lot(s) and;
  - xii. the development is not at or within the 35 NEF/NEP composite noise contour line.
3. A Noise Control Study consistent with the Council approved Environmental Noise Control Guidelines is required as part of a complete application for any development proposal within the 25 NEF/NEP composite noise contour line as illustrated on Schedule K and Annex 10.
- c. Within the AVDZ, noise-sensitive uses may be permitted between the NEF/NEP 25 composite noise contour line and the Ottawa Airport Operating Influence Zone subject to a detailed Noise Control Study or application of the prescribed measures to address airport noise as described in the Environmental Noise Control Guidelines.
4. New development and redevelopment will comply with the Ottawa Airport Zoning regulations as enacted under the *Federal Aeronautics Act*.
5. Development conditions and best practices may be required to reduce the risk of wildlife conflict with airport operations. Proposed land uses, municipal infrastructure projects and activities in the vicinity of the Ottawa International Airport will have regard to the Ottawa MacDonald-Cartier International Airport Authority Wildlife Management Plan.
6. Within the AVDZ the creation of open water habitat areas will be prohibited.
7. Throughout the city, land uses, activities and the use of building materials with potential to interfere with safe operation of aircraft, the performance of navigation aids, or telecommunication will be prohibited.

### **LANDS OUTSIDE OF THE BOUNDARY OF THE AIRPORT VICINITY DEVELOPMENT ZONE**

The Airport Zoning Regulations also apply to lands outside of the 'Airport Vicinity Development Zone' where these lay within the runway approach surfaces. Mapping is available from the Ottawa International Airport Authority to determine the precise location of affected areas.

8. Development within runway approach surfaces will be subject to the overall building height provisions of the Airport Zoning Regulations.

### **OTHER LOCAL AIRPORTS AND AERODROMES**

9. Proposed development in the vicinity of Carp and Rockcliffe airports will comply with TP 312 Aerodrome Standards and Recommended Practices affecting building heights.
10. Noise-sensitive development will not be permitted within the 30 NEF / NEP contour lines at the Carp or Rockcliffe airports.
11. Development applications that propose noise-sensitive land uses between the 25 NEF / NEP and the 30 NEF / NEP contour lines at the Carp or Rockcliffe airports require a Noise Control Study.

- b) In Volume 1 Section "Glossary" add the following:

#### *Airport Operating Influence Zone (AOIZ)*

This line is a composite of the 30 NEF and 30 NEP noise contours, and takes into account visible features such as roads and watercourses. The zone was established to restrict noise-sensitive development which can be disturbed by noise. The boundary of the AOIZ is not subject to interpretation and the precise location must be read from a map at a scale of 1:50,000 as prepared by the City of Ottawa or Ottawa International Airport Authority.

#### *Airport Vicinity Development Zone (AVDZ)*

Lands within the "Airport Vicinity Development Zone" are constrained by the Ottawa Airport Zoning Regulations. This line is based on the most restrictive of either the 25 NEF and NEP contours (the 25 noise composite line) as well as the "Outer

Limitation" and "Bird Hazard Zone" boundaries as defined by the Ottawa Airport Zoning Regulations. The boundary of the AVDZ has been drawn to coincide with physical features such as roads, creeks, rail lines, and lot lines where possible, as shown on Schedule K, and is not subject to interpretation. The precise location of the AVDZ must be read from a map at a scale of 1:50,000 as prepared by the City of Ottawa or Ottawa International Airport Authority.

### **PART C – IMPLEMENTATION**

- a) The relevant policies of Section 5 - Implementation of the City's Official Plan apply to this amendment.

The implementing by-laws are to be prepared by Legal and confirmed by the Community Planning Unit.

### Document 3 – Details of Recommended Zoning

The proposed change to the City of Ottawa Zoning By-law No. 2008-250 for lands in proximity to the MacDonald-Cartier International Airport, Rockcliffe Airport and Carp Airport as shown on Schedule K and Annex 10 of the Official Plan:

1. The following changes, indicated by strikethrough as text to be deleted and underlining to indicate text to be added, are hereby made to the City of Ottawa Comprehensive Zoning By-law Section 70.

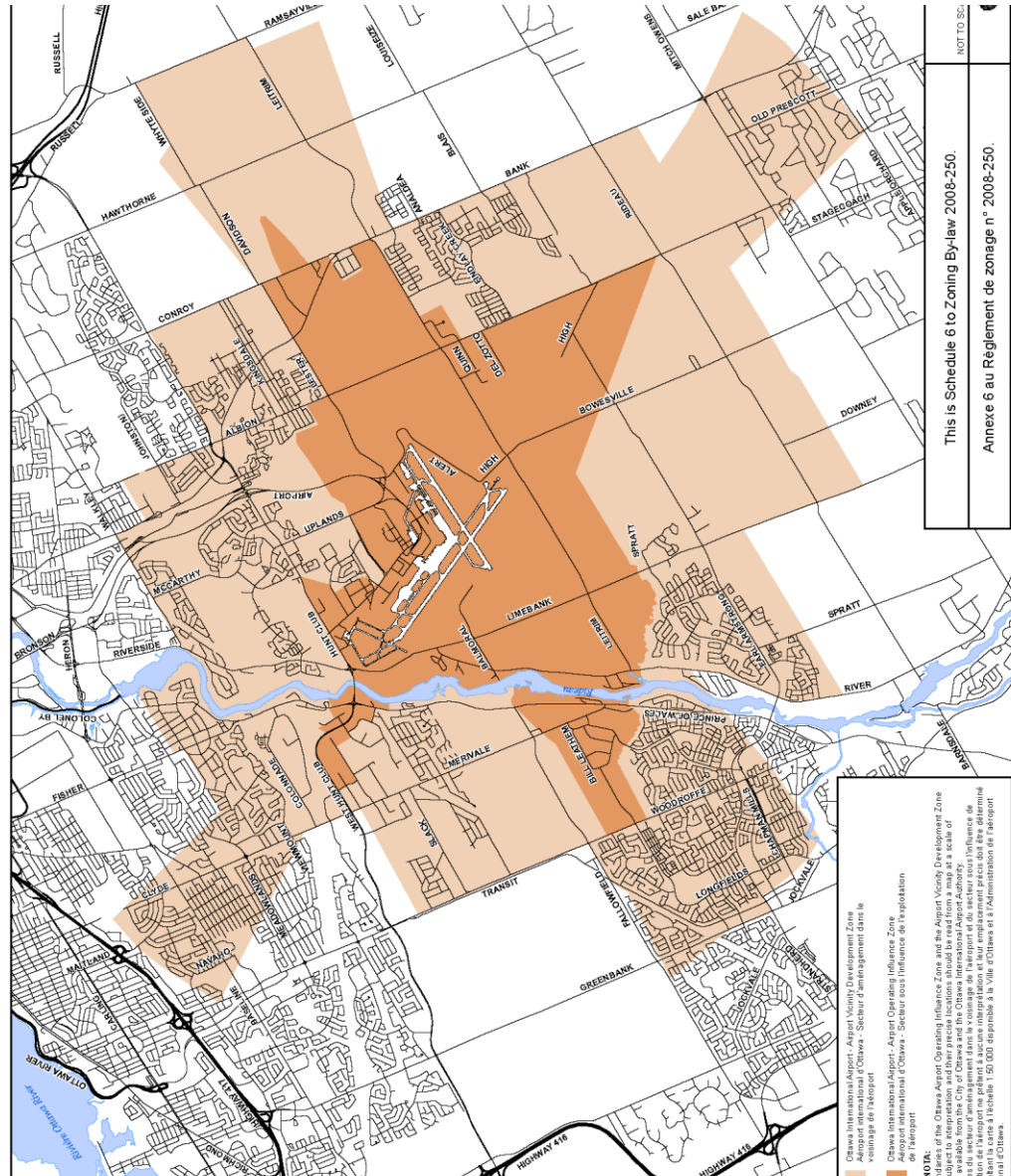
#### Protection of Airport Operations (Section 70)

70.

- 1) The Airport Operating Influence Zone (AOIZ) and the Airport Vicinity Development Zone (AVDZ) are defined planning areas based on the ~~2013~~ 2043 Noise Exposure Forecast (NEF) and the ~~2023~~ 2043 Noise Exposure Projection (NEP) aircraft contours. These zones, as shown on Schedule 6, apply development restrictions to protect lands uses and activities from noise impacts emanating from the aircraft and airport operations and ~~to~~ conversely also protect airport operations from potential complaints arising from the development of residential and noise sensitive uses too close to the airport. Policies relating to these zones are detailed in Section 4.8.6~~7~~ of the Official Plan titled Land-Use Constraints Due to Airports and Aircraft Noise Operations. The AVDZ also incorporates elements of the Ottawa Macdonald-Cartier International Airport Zoning Regulations.
- 2) Airport Zoning Regulations made pursuant to the Aeronautics Act (Canada) ~~also~~ apply to private all lands property in the vicinity of the Ottawa Macdonald-Cartier International Airport. The regulations prevent lands adjacent to and in the vicinity of the airport from being used or developed in a manner that is incompatible with the operation of the airport or the safe operation of aircraft or ~~causes~~ may cause interference with navigational aids and communications. Constraints to development include Obstacle Limitations Surfaces, natural growth, bird hazards (such as open water areas) and interference with communications ~~and aeronautical facilities~~.

Airport Zoning Regulations and the regulation of all matters of aviation are administered by Transport Canada, and ~~will prevail~~ in the event of a conflict with the provisions of this by-law the Airport Zoning Regulations will prevail.

- 3) Development in the vicinity of the Carp Airport, and Rockcliffe Airport, must take into consideration guidelines found in the Transport Canada Document TP312E – Aerodrome Standards and Recommended Practices. With respect to development in the vicinity of the Carp Airport, runway 10-28 must be protected as a "4C CAT 1" runway, and runway 4-22 must be protected as a "1C NON-INSTR" Runway.
2. Replace Schedule 6 of the Comprehensive Zoning By-law with the map as shown below:



**Document 4 – Proposed Amendments to the Environmental Noise Control Guidelines**

**Details**

The following changes are here by made to the City of Ottawa Council adopted Environmental Noise Control Guidelines (2016).

- a) In the Environmental Noise Control Guidelines: Introduction and Glossary; delete the existing definition of Noise Sensitive Land Use and replace with the following:

|  |  |
|--|--|
| <p><b>Noise Sensitive Land Use</b><br/>(NPC-300)</p> | <p>Means:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> a property of a person that accommodates a dwelling and includes a legal non- conforming residential use; or</li> <li><input type="checkbox"/> a property of a person that accommodates a building used for a noise sensitive commercial purpose; or</li> <li><input type="checkbox"/> a property of a person that accommodates a building used for a noise sensitive institutional purpose.</li> </ul> <p>From a land use planning perspective, a noise sensitive land use may be comprised of spaces that are noise sensitive and spaces that are not noise sensitive. The outdoor living area (OLA) associated with a noise sensitive land use is considered a noise sensitive space.</p> <p>A land use that would normally be considered noise sensitive, such as a dwelling, but is located within the property boundaries of the stationary source is not considered a noise sensitive land use.</p> |
|--|--|

- b) In the Environmental Noise Control Guidelines: Introduction and Glossary; add the following definitions:

|   |  |
|---|--|
| <p><b>Noise Sensitive Commercial Purpose Building</b></p> | <p>means a building used for a commercial purpose that includes one or more habitable rooms used as sleeping facilities such as a hotel and a motel.</p> |
|---|--|

|  |  |
|--|--|
| (NPC-300)  |  |
| <b>Noise Sensitive Institutional Purpose Building</b><br>(NPC-300) | Means: <ul style="list-style-type: none"> <li>• a building used for an institutional purpose, including an educational facility, a day nursery, a hospital, a health care facility, a shelter for emergency housing, a community centre, a place of worship and a detention centre.</li> <li>• A place of worship located in commercially or industrially zoned lands is not considered a noise sensitive institutional purpose building with respect to stationary noise emanating from commercial or industrial uses.</li> </ul> |

- c) In the Environmental Noise Control Guidelines Part 1, Environmental Noise Control Guidelines for Land Use Planning; replace Section 4.0 with the following:

#### 4.0 Aircraft and Aircraft Operations

Noise impact due to aircraft is distinct from other forms of environmental noise assessment. For instance, many aircraft emit low frequency sound. This low frequency sound can be very difficult to mitigate at the point of reception. In addition, measures to address stationary or other transportation noises may not address aviation noise. The impact of aircraft noise also varies significantly by aircraft size and type, time of day, climatic conditions, frequency of flights, and patterns of flight traffic. Noise impacts from aircraft must be therefore based on modelled projections of noise effects on receivers.

The primary and preferred method of protection from aircraft noise is avoidance. To this end City and Provincial policies regulate land use in the vicinity of airports. Where necessary, Ottawa like other cities in Canada restricts noise sensitive development in the vicinity of airports. Areas within the City where aviation noise impacts noise sensitive land use have been identified using the Transport Canada Noise Exposure Forecast (NEF) modeling method.



The NEF method predicts the potential degree of community impact from aircraft noise based on factors such as: sound levels of various aircraft, operational considerations; predicted number of flights; and time of day (night being weighted more strongly). The result is a contour map illustrating where noise arising from aviation is most predicted to impact sensitive land uses. Under provincial policy the results of NEF modeling must be integrated into land use planning documents by the City.

The NEF method used in Ottawa produces two ranges of data. The first is the Noise Exposure Forecast (NEF) which estimates based on forecasted activity 5 to 8 years in the future. The second is the Noise Exposure Projection (NEP) which estimates impact based on predicted airport activity 20 years or more into the future. The two lines are then brought together and illustrated as a combined NEF/NEP.

To aid in land use planning the NEF/NEP contour lines in Ottawa have been made into Composite Lines. These composite lines are based on the NEF/NEP and take into account historical and existing land use patterns, existing land use permissions, and topographic features. To aid in long term land use planning the composite lines follow property boundaries where possible. The key composite lines used in Ottawa are the NEF/NEP 25 composite, the NEF/NEP 30 composite (also called the Airport Operating Influence Zone) and the NEF/NEP 35 composite. Each of these lines is illustrated on Annex 10 of the Official Plan and is not subject to further interpretation, refinement or recalculation.

The City and Airport will not consider site specific amendments to Annex 10 to allow for development that would otherwise be restricted and any planning or engineering submission that varies from the mapping as illustrated on Annex 10 will be not be accepted.

#### 4.1 Sound Level Criteria for Aircraft Noise

Sound level limits due to aircraft are addressed in the Ministry of the Environment and Climate Change document NPC-300. Unless otherwise noted, the City requires development to be consistent with the NPC-300 guidelines as reproduced in Table 4.2a below.

| <b>TABLE 4.2A: SOUND LEVEL LIMITS FOR AIRCRAFT NOISE (FROM NPC-300 TABLE C-4)</b>                                      |                       |
|--|-----------------------|
| <b>Outdoor Limit</b>   |                       |
| <b>Time Period</b>   | <b>NEF/NEP</b>        |
| 24-hour  | 30                    |
| <b>Indoor Limit – 24 hour period</b>   |                       |
| <b>Type of Space</b>   | <b>Indoor NEF/NEP</b> |
| Living/dining/den areas of residences, hospitals, schools, nursing/retirement homes, daycare centres, etc.             | 5                     |
| Sleeping quarters  | 0                     |
| *The indoor NEF/NEP values are used to determine acoustical insulation requirements based on the NEF/NEP contour maps. |                       |

Note that Outdoor Living Areas are not defined in new development greater than the 30 NEF/NEP contour. New noise sensitive development in this area is not generally permitted. Nevertheless, where development or redevelopment is permitted it will be subject to an additional warning clause provision stating that the outdoor environment is subjected to aircraft noise.

The Province also provides for supplementary indoor sound level limits for aircraft noise (see Table 4.2b below). These limits, which apply to permitted development inside the AOIZ, are based on the windows and doors in an indoor space being closed and should be addressed in any noise study prepared for the City.

**TABLE 4.2B: SUPPLEMENTARY INDOOR SOUND LEVEL LIMITS FOR AIRCRAFT NOISE (ADAPTED FROM NPC-300 TABLE C-10)**

**Applicable over 24-hour period**

| <b>Type of Space</b>   | <b>Indoor NEF/NEP</b> |
|--|-----------------------|
| General offices, reception areas, retail stores, etc.                      | 15                    |
| Individual or semi-private offices, conference rooms, etc.                 | 10                    |
| sleeping quarters of hotels/motels, theatres, libraries, places of worship | 5                     |
| Sleeping quarters of residences, hospitals, nursing/retirement homes, etc. | 0                     |

#### 4.2 Noise Control Measures for Aircraft Noise

The foremost and most desirable noise control procedure for aircraft noise is to locate sensitive land use outside of the NEF/NEP 25 composite noise contour.

Between the NEF/NEP 25 and the AOIZ the Prescribed Measures for Aircraft Noise as detailed in Part 6 of the Environmental Noise Control Guidelines must be implemented unless a detailed aircraft noise impact assessment is completed.

Inside the AVDZ, or where a specific sensitivity to noise is identified, a noise study will be required. The noise study will identify measures in addition to the Prescribed Measures to achieve sound levels limits in the indoor environment. Because there is no acceptable way to mitigate aircraft noise in outdoor areas some land uses may be prohibited.

A warning clause is required for new noise sensitive development within the AVDZ and additional warning clauses may be required for any development within the AOIZ. These warning clauses are not considered to be a form of noise mitigation or attenuation.

- d) In the Environmental Noise Control Guidelines Part 6, Prescribed Measures for Aircraft Noise; revise all sections as shown below (indicated by strikethrough as text to be deleted and underlining to indicate text to be added):

## 6.0 Aircraft and Aircraft Operations

### 1.0 Introduction

The following are the prescribed measures to mitigate the impact of aircraft noise on residential communities proposed between the 25 NEF/NEP and the AOIZ, and have been prepared for the guidance of landowners and residential developers and builders, for implementation by the City. These measures include the components of building design necessary to meet the Ministry of the Environment and Climate Change indoor noise criteria for aircraft noise (~~LU131 dated October 1997~~ as outlined in NPC-300); the ventilation requirements; and the warning clauses required to address aircraft noise. The prescribed measures pertain to typically built track housing in this Region, for low to mid-rise residential units. They may be used for residential development of this nature, in lieu of an aircraft noise study. If the prescribed measures are selected as the mechanism for addressing aircraft noise, they will apply to all residential units between the 25 NEF/NEP and the AOIZ, regardless of the contour location. They are based on the minimum requirements for the 30 NEF/NEP contours.

The developer/builder may opt to conduct an aircraft noise impact assessment rather than following the measures outlined herein.

The prescribed measures do not apply to high-rise apartment type dwellings, nor to other noise-sensitive development such as schools, hospitals, homes for the aged, or other such similar facilities. The prescribed measures are not to be used for commercial development or for any potential infilling of residential land use within the AOIZ. In the above-noted cases, approval of the proposed development would be conditional to the completion of an aircraft noise study to determine the requirements on a case by case basis.

It is the responsibility of the landowner/developer/builder to ensure compliance with the prescribed measures. Where there is any deviation from the assumptions used to calculate the acoustical building components identified (for example, an increase in the ratio of window area to total floor area, or exterior wall to floor area) or if changes are proposed to the prescribed measures, a reassessment of building components is necessary, as well as certification by a qualified acoustical consultant demonstrating compliance with the Ministry of the Environment and Climate Change indoor noise criteria for aircraft noise (~~LU131 dated October 1997~~ as outlined in NPC-300). These measures are to be used in relation to aircraft noise associated with flyover activities. A

separate assessment may be required for ground based noise, depending on the location of the proposed development in relation to the Airport.

If the proposed development is potentially affected by other noise sources (road, rail, or other stationary noise), a separate assessment must be conducted to determine the combined impact and the noise attenuation features required in building design.

- e) In Appendix A of the Environmental Noise Control Guidelines replace the Aircraft warning clauses as shown below.

#### Aircraft Noise Warning Clauses

Aircraft warning clauses are required for all development within the Airport Vicinity Development Zone and in the Carp and Rockcliffe Airport areas. In addition, the City may consider addition of a warning clause to any other lands in the city where recommended by the Airport Authority.

#### TABLE A3 AIRCRAFT NOISE WARNING CLAUSES

| Area   | Example   |
|--|---|
| Noise Sensitive Development outside of NEP 25 and within Airport Vicinity Development Zone | <i>Purchasers/tenants are advised that due to the proximity of the airport, noise from the airport and individual aircraft may at times interfere with outdoor or indoor activities.</i>  |
| And  |   |
| Non-noise sensitive development within the Airport Vicinity Development Zone               |   |
| Noise Sensitive Development: outside the AOIZ but within NEP 25;                           | <i>Purchasers/building occupants are forewarned that this property is located in a noise sensitive area due to its proximity to Ottawa Macdonald-Cartier International Airport / Carp / Rockcliffe Airport. In order to reduce the impact of aircraft noise in the indoor spaces, the building has been designed and built to meet provincial standards for noise control by the use of components and building systems that provide sound attenuation. In addition to the building components (i.e. walls, windows, doors,</i> |
| or   |   |
| within the Carp or Rockcliffe Airport areas and outside of the AOIZ boundary               |   |

TABLE A3 AIRCRAFT NOISE WARNING CLAUSES

| Area  | Example   |
|---|---|
|   | <p><i>ceiling-roof), since the benefit of sound attenuation is lost when windows or doors are left open, this building has been fitted with a forced air heating system, all components of which are sized to accommodate the future installation of central air conditioning_ by the owner/occupant.</i></p> <p><i>Despite the inclusion of noise control features within the building, noise due to aircraft operations may continue to interfere with some indoor activities and with outdoor activities, particularly during the summer months. The purchaser/building occupant is further advised that the Airport is open and operates 24 hours a day, and that changes to operations or expansion of the airport facilities, including the construction of new runways, may affect the living or working environment of the occupants of this property.</i></p> <p><i>The Ottawa Macdonald-Cartier International Airport Authority, its acoustical consultants and the City of Ottawa are not responsible if, regardless of the implementation of noise control features, the purchaser/occupant of this property finds that the noise levels due to aircraft operations continue to be of concern or are offensive.</i></p> |
| <p>All noise sensitive development within the AOIZ (NEF/NEP 30)</p> | <p><i>Purchasers/building occupants are forewarned that this property is in an area subjected to low flying aircraft and therefore substantial aviation noise due to its proximity to Ottawa Macdonald-Cartier International Airport / Carp / Rockcliffe Airport.</i></p> <p><i>Despite the inclusion of noise control features within the unit building, noise due to aircraft operations are likely to interfere with some indoor</i></p>   |

**TABLE A3 AIRCRAFT NOISE WARNING CLAUSES**

| Area | Example  |
|------|--|
|      | <p><i>activities. Furthermore, outdoor activities may frequently be subjected to aviation noise that may cause annoyance or discomfort.</i></p> <p><i>In order to reduce the impact of aircraft noise in the indoor spaces, the building has been designed and built to meet provincial standards for noise control by the use of components and building systems that provide sound attenuation. Since the benefit of sound attenuation is lost when windows or doors are left open, this building has been fitted with a forced air heating system and central air conditioning which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the City's and the Ministry of the Environment and Climate Change's noise criteria.</i></p> <p><i>Despite the inclusion of noise control features within the building noise due to aircraft operations may continue to interfere with some indoor activities and with outdoor activities, particularly during the summer months. The purchaser/building occupant is further advised that the Airport is open and operates 24 hours a day, and that changes to operations or expansion of the airport facilities, including the construction of new runways, may affect the living or working environment of the occupants of this property/area.</i></p> <p><i>The Ottawa Macdonald-Cartier International Airport Authority, it's acoustical consultants and the City of Ottawa are not responsible if the purchaser/occupant of this property finds that the noise levels due to aircraft operations continue to</i></p> |

**TABLE A3 AIRCRAFT NOISE WARNING CLAUSES**

| Area  | Example   |
|---|---|
| All development within the NEF/NEP 35 Composite Noise contour | <hr/> <p data-bbox="711 436 1143 476"><i>be of concern or are offensive.</i></p> <hr/> <p data-bbox="711 499 1440 722"><i>Purchasers/building occupants are forewarned that this property is located in an area subjected to low flying aircraft and therefore substantial aviation noise due to its proximity to the runway of Ottawa Macdonald-Cartier International Airport.</i></p> <p data-bbox="711 743 1440 1381"><i>In order to reduce the impact of aircraft noise in the indoor spaces, all buildings have been designed and built to meet provincial standards with the use of components and building systems that provide sound attenuation. In addition to the building components (i.e. walls, windows, doors, ceiling-roof), since the benefit of sound attenuation is lost when windows or doors are left open, all buildings-have been fitted with a forced air heating system and central air conditioning which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the City's and the Ministry of the Environment and Climate Change's noise criteria.</i></p> <p data-bbox="711 1402 1440 1625"><i>Despite the inclusion of noise control features within the building, noise due to aircraft operations may interfere with some indoor activities and will often interfere with outdoor activities, particularly during the summer months.</i></p> <p data-bbox="711 1646 1440 1961"><i>The purchaser/building occupant is further advised that the Airport is open and operates 24 hours a day and that changes to operations or expansion of the airport facilities, including the construction of new runways, will negatively affect the environment and comfort of the occupants of this property.</i></p> <hr/> |



**TABLE A3 AIRCRAFT NOISE WARNING CLAUSES**

| Area | Example   |
|------|---|
|      | <hr/> <p><i>The Ottawa Macdonald-Cartier International Airport Authority, its acoustical consultants and the City of Ottawa are not responsible if, regardless of the implementation of noise control features, the purchaser/occupants of this property finds that the noise levels due to aircraft operations continue to be of concern or are offensive.</i></p> <hr/> |