Appendix A – Agenda

Billy Bishop Toronto City Airport
Community Liaison Committee Meeting # 38

May 27th, 2020
6:30 p.m. – 8:30 p.m.
Call-In Details - Zoom Virtual Meeting

AGENDA

6:30 Log-In & Welcome (Jim Faught)
6:40 Review of Meeting Minutes (Jim Faught)
6:45 PortsToronto updates (Gene Cabral)
- COVID-19
- Sustainability Report

7:05 PortsToronto Capital Project Update (Bojan Drakul)
7:25 Community Updates (YQNA, BQNA, TICA)
- BQNA's post-COVID questions

7:55 Bathurst Quay Neighbourhood Plan Update (Bryan Bowen)
8:10 Noise Management Subcommittee Updates (Angela Homewood & Hal Beck)
- Revised Terms of Reference
- 2019 Year in Review
- Air Quality Exposure Study Update – $6,000 in curfew violation being sent to UofT to support the study

8:25 Business Arising
8:30 Adjourn

Appendix B – BBTCA Capital Program Update

Billy Bishop Toronto City Airport
Capital Program 2020 Update to Community Liaison Committee

Date: May 27, 2020

Presented By: Bojan Drakul / Christopher Sawicki
Location: Conference Call

PORTS TORONTO

Agenda

- Review Status of Key PortsToronto's Capital Program Projects to be Completed at the Airport in 2020

Airfield Rehabilitation Program – Remaining Works

- A few minor works to be completed during final year of Maintenance period including:
  1. Raise / Relocate Bell Manhole (5-10 days, high water level dependent)
  2. Miscellaneous Electrical Deficiencies (5-10 days)
- Working on completing as much work as possible in June 2020
- Will attempt to do as much work as possible during daytime
- Same measures implemented to minimize noise and lighting impacts on community for any work that may have to be done at night
- Do not anticipate need for night time ferry use at this time

- Update to airport access including improvements to traffic flow and passenger experience
- Storm water management updates
- Coordinated with Bathurst Quay Neighbourhood Plan and Dockwall Repair including Record of Site Condition for change of land use from industrial to parks and open space
- Construction ongoing
- Project in the process of being re-phased to accelerate work and take advantage of no commercial traffic at the airport
- Attempt to complete majority of work by July / August
- Canopy installation for taxi coral and part of finger lot deferred to 2021

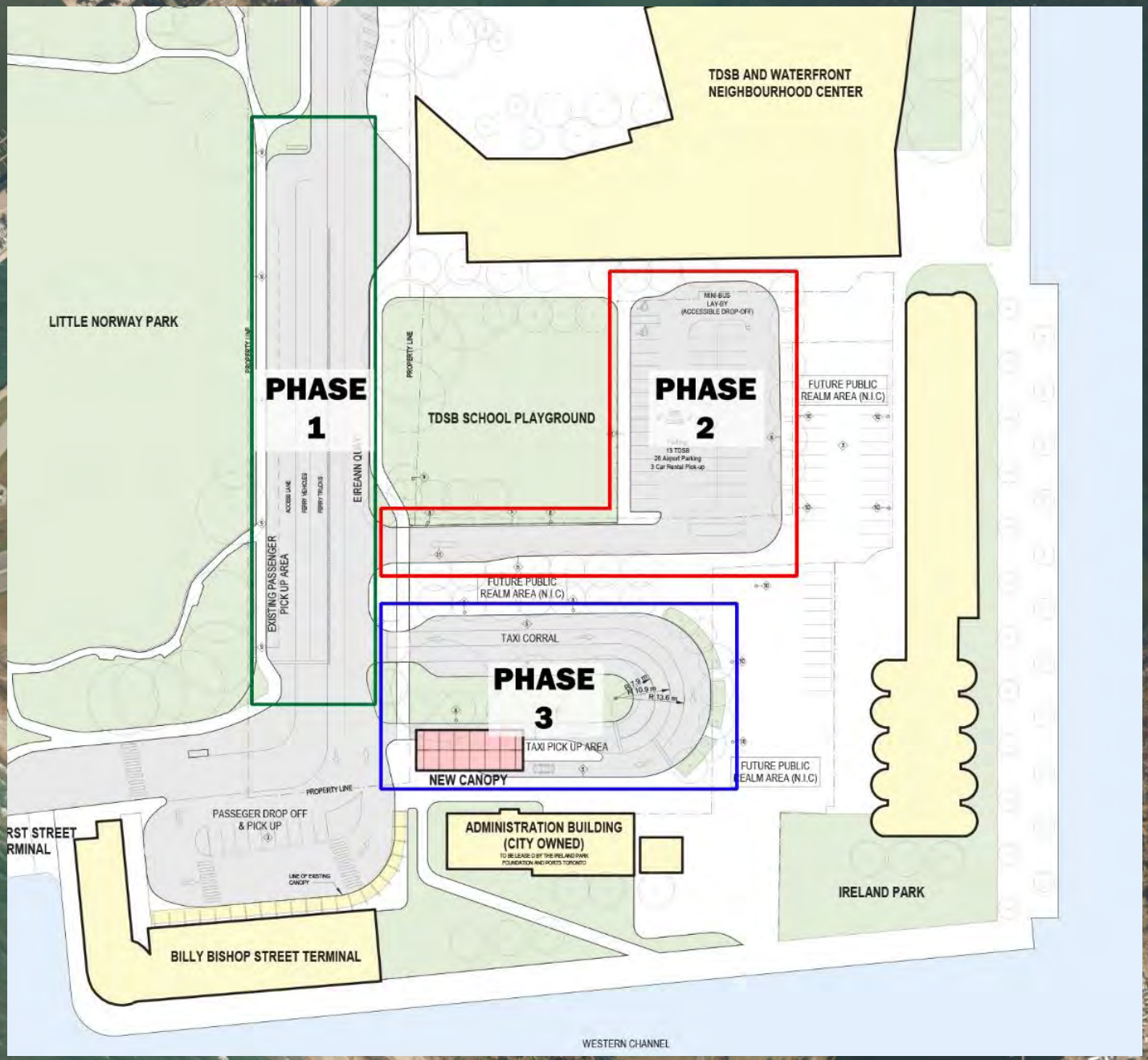
City Side Modernization

Tentative Construction Schedule:

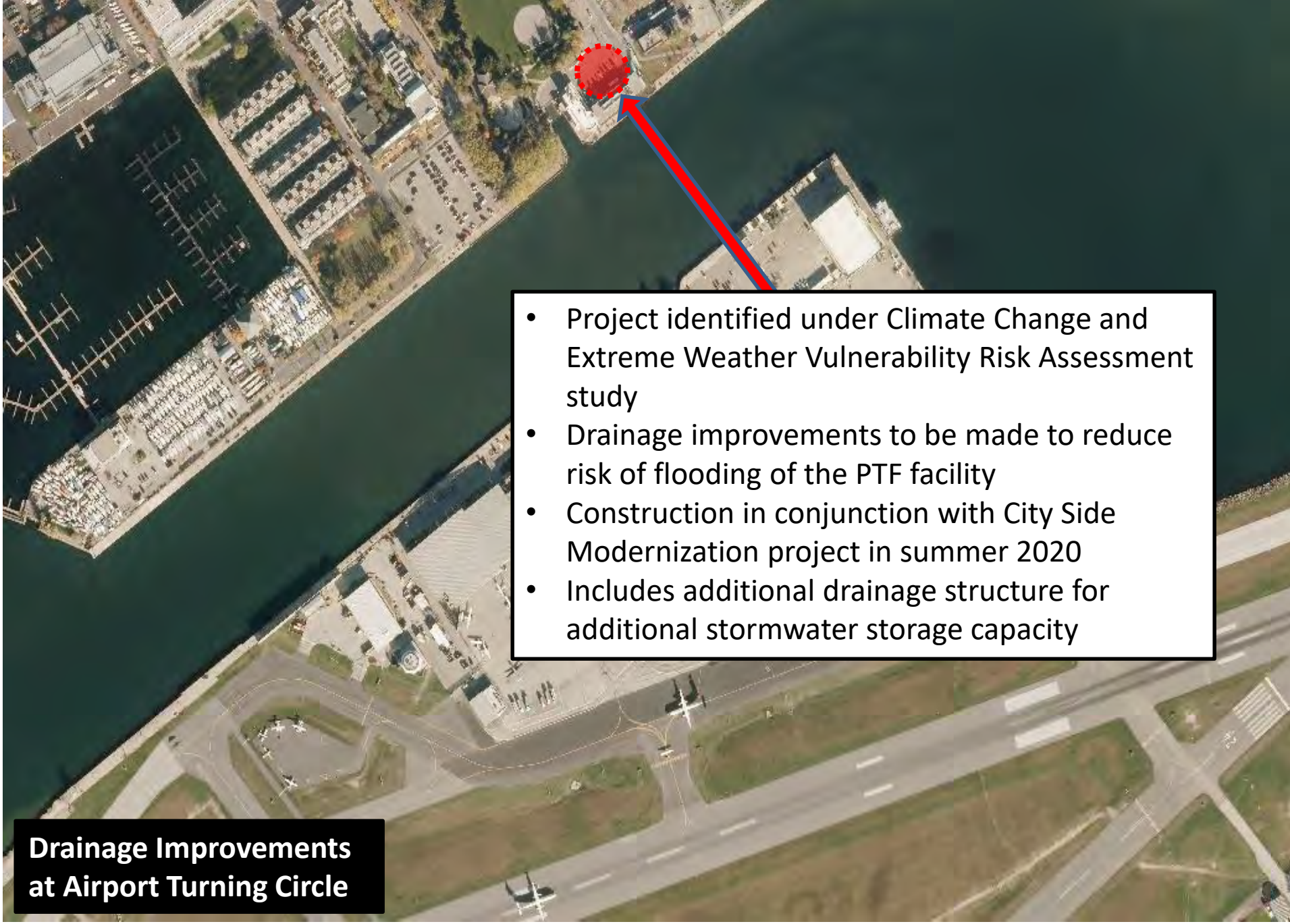
PHASE 1:
April – mid May

PHASE 2:
mid May – mid June

PHASE 3:
mid June – mid July
(time permitting)
or
mid Sept – mid Oct

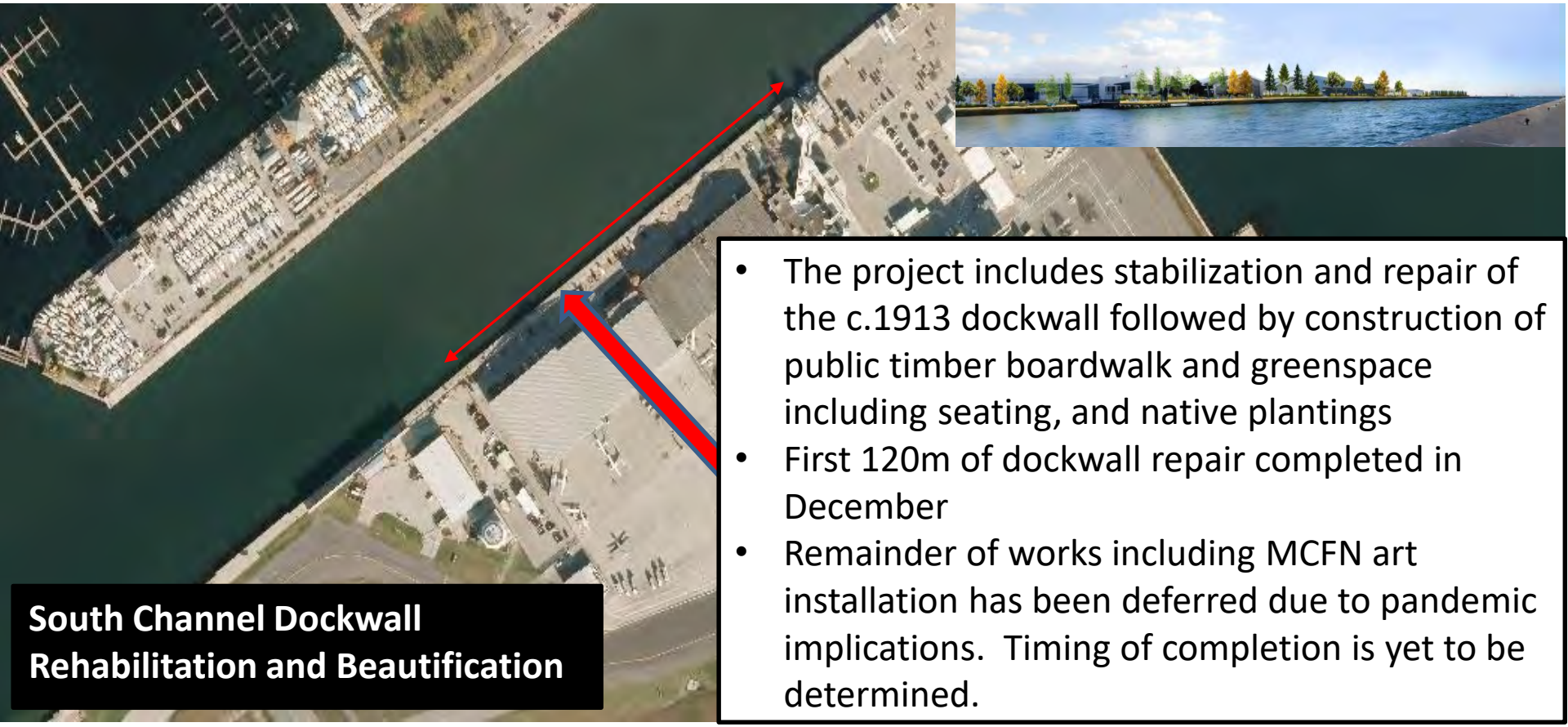


City Side Modernization



- Project identified under Climate Change and Extreme Weather Vulnerability Risk Assessment study
- Drainage improvements to be made to reduce risk of flooding of the PTF facility
- Construction in conjunction with City Side Modernization project in summer 2020
- Includes additional drainage structure for additional stormwater storage capacity

Drainage Improvements at Airport Turning Circle



South Channel Dockwall Rehabilitation and Beautification

- The project includes stabilization and repair of the c.1913 dockwall followed by construction of public timber boardwalk and greenspace including seating, and native plantings
- First 120m of dockwall repair completed in December
- Remainder of works including MCFN art installation has been deferred due to pandemic implications. Timing of completion is yet to be determined.

“Marilyn Bell I”

- The MB1 to be the first lithium-ion battery powered electric vessel to operate in Canada
- The key goals to be achieved:
  - ✓ eliminate pollutant CO_2 emissions from current diesel engines
  - ✓ reduction of the noise emissions
- Design ongoing by Canal Marine
- Project execution has slowed down due to impacts of the pandemic
- Anticipated back in service date has been revised to July 2020

“Marilyn Bell I” (MB I) Ferry Electrification

Stormwater and Glycol Management Study and Design

- Study behind schedule due to difficulty in accessing infrastructure due to high water levels
- To be completed this spring
- Recommended improvements from the study will be taken into design in 2021

Noise Mitigation Study

- Study has been placed on hold due to shutdown of airport's commercial operations
- Date for continuation is to be determined and will be aircraft traffic dependent

Gate 106 Replacement

- Relocation and replacement of the existing security Gate 106
- Currently in design phase, with construction stage scheduled for 2021.

Miscellaneous Other Activities by PortsToronto

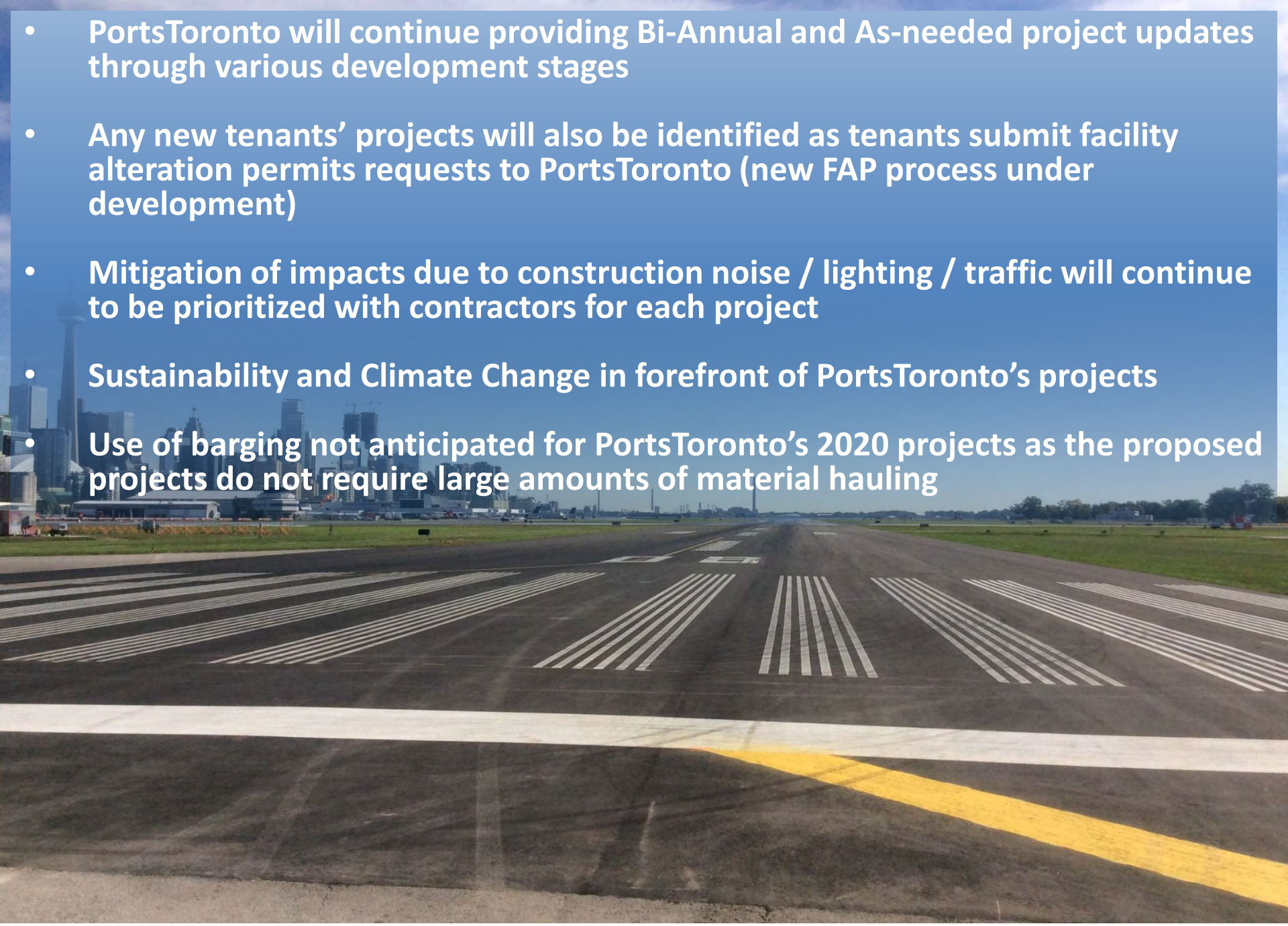
- New Airfield Rescue and Fire Fighting (ARFF) truck and airfield sweeper have been delayed to 2021 delivery due to pandemic
- New portable pumps are in the process of being procured to assist with high water levels in the future

Major Projects by Airport's Tenants

New Hangar (Stolport FBO Project)

- Located west of the existing Hangar 1
- Construction ongoing
- Anticipated the hangar will be opened in Summer 2020

- PortsToronto will continue providing Bi-Annual and As-needed project updates through various development stages
- Any new tenants' projects will also be identified as tenants submit facility alteration permits requests to PortsToronto (new FAP process under development)
- Mitigation of impacts due to construction noise / lighting / traffic will continue to be prioritized with contractors for each project
- Sustainability and Climate Change in forefront of PortsToronto's projects
- Use of barging not anticipated for PortsToronto's 2020 projects as the proposed projects do not require large amounts of material hauling



PORTS TORONTO

Appendix C – Community Update Questions, Part 3

III. Longer Term Impacts

1. The community has been benefiting from the current drop in car traffic, air and noise emissions from the airport. Do you anticipate a full recovery of airport use or a reduced level of airport use? Do you anticipate an assumed drop in traffic and noise?

2. How have you factored in the enduring quality of people's behaviour/attitude change? For example do you anticipate less business travel and more zoom meetings, more hesitancy to cross borders and sit in closer quarters with others?

3. If airline business lags, does Ports Toronto have alternative plans for the airport?

4. What effect will any alternative plans have on the airport's operations and Toronto Harbour's finances?

The Airport's role in a transition to a greener economy

5. Will you revisit your 2019 sustainability and master plans? In particular the focus on reducing air, noise and water pollution. For example the 2019 Sustainability Report indicates encouragement of public transit use, however with recent pandemic behavious change, passengers may prefer taxis and Ubers over shuttle and LRT for self-protection.

6. What other measures is BBTCA considering with regard to the statement that follows?

   With the opportunity that comes with operating an urban airport in Canada's largest city come heightened expectations and responsibility to conduct our operations in a manner that reflects balance with the surrounding community. It is our commitment to balance that guides us and informs our vision for Billy Bishop Airport to ensure that an effective equilibrium is struck between commercial and community interests, and that measures are in place to mitigate the airport's operational impacts such as noise.

   (Taken from 2019 Sustainability Report)

Appendix D – Noise Management Subcommittee 2019 Year In Review

PortsToronto Billy Bishop Toronto Centre Airport

Noise Management Subcommittee
2019 Year in Review

Formed in 2018, the PortsToronto Billy Bishop Toronto Centre Airport (BBTCA) Noise Management Subcommittee (NMSC) is a standing committee reporting to the PortsToronto BBTCA Community Liaison Committee (CLC) with representation from the Bathurst Quay Neighbourhood Association (BQNA) and York Quay Neighbourhood Association (YQNA). As part of its mandate, the NMSC serves as a two-way communication platform to enable residents to communicate perspectives and concerns regarding airport related noise to airport management, and enable airport management to communicate and discuss proposals, planning issues, and other information to stakeholders and the broader community relating to airport noise. As such, NMSC representatives from the BQNA and YQNA regularly report on perspectives and concerns on technical matters pertaining to airport noise that exist in their neighbourhoods.

The NMSC also serves as a forum for learning about and dissecting existing noise management principles and their application in both the historic and current context to land development.

Figure 1. Reporting relationship of Billy Bishop Toronto Centre Airport stakeholders to the CLC and NMSC

In January 2020, the NMSC underwent the first review of its mandate to determine whether to renew the subcommittee's term for another year. The following is a reflection on the past year's work by the NMSC.

Reflecting on a Year of Work

Over the past year, the NMSC met five times (this was preceded by one meeting in 2016 and two meetings in 2018). What follows are highlights from the NMSC's efforts to learn about noise management principles surrounding noise mitigation:

- **Ground Noise Study (RFP)** – The NMSC provided comments on the initial draft of the RFP for the Ground Noise Study. Since awarding the RFP, the NMSC has met with one of the consultants, R.J. Burnside, to discuss their proposed methodology, preliminary data gathering strategy, and suggested locations for the placement of temporary noise monitors informed by community members' experience of noise impacts.
- **Permanent Noise Management Monitor Installation** – The NMSC has worked with airport management and their connections within the community to acquire and install an additional permanent, real-time noise monitors on the Kings Landing Condominium. PortsToronto is currently awaiting installation of additional monitors at Ontario Place and Windward Co-op buildings.
- **Annual Noise Management Report** – The NMSC provided feedback on the 2018 Annual Noise Management Report. Several key areas of feedback emerged including the following:
    - The Annual Noise Management Report should include definitions and descriptions that clarify activities and operations commonly associated with noise complaints.
    - The current noise reporting process is complicated.
    - Data presentation can be simplified.
    - Additional technical data, airport procedures on mitigating noise impacts, and standards should be appended to improve transparency with the community.
    - Subcommittee members suggested data relating to noise decibels, busiest and quietest airport days, permanent noise management monitor data reported in dBA and dBZ weighted decibels, fly-by per hour data, and meteorological conditions to allow for comparison across years.
    - Concerns that the document functions more as a public relations piece and should be named a "Noise Complaint Report" to more accurately convey the content of the report.

  This discussion along with subsequent discussions has compelled PortsToronto to consider refinements to the airport management's approach for tackling annual noise reporting.

- **Researching Information on Noise and Improving Noise Literacy** – The NMSC continued to develop their collective knowledge on noise regulations and the effects of different variables that influence how noise is measured and perceived. Key discussions and presentations from this year (included as either hyperlinks to meeting minutes or attachments as follows):
    - Establishing a community agreement that PortsToronto's future noise studies and Annual Noise Management Reports report noise measurements in both dBA and dBZ weighted decibels. Reporting both dBA and dBZ provides a more useful measure of noise by documenting bass frequencies generated by airport activity. This is a voluntary

approach that exceeds the minimum reporting requirements set out by the Province of Ontario.

- NMSC member Wayne Christian presented on the impact of meteorological variables impacting noise propagation and perception (Meeting #6, May 29th, 2019). Read NMSC Meeting #6 Minutes.
- Header Merza, Senior Noise Engineer with the Provincial Ministry of Environment, Conservation and Parks presented on Provincial Noise Standards in their historical context and current application as they relate to land development (Meeting #7, July 24th, 2019). Attached in *Appendix B* and included in NMSC Meeting #7 Minutes.

Term Renewal

The NMSC agreed to renew its mandate for another year with respect to further clarifying and deepening its knowledge about environmental noise matters as they relate to land uses surrounding the Billy Bishop Toronto Centre Airport. The NMSC also discussed the timeline for the recently commenced noise study, and the anticipated completion date for this study being pushed further into 2021 in light of changes in the noise environment resulting from COVID-19 workplace initiatives. It was concluded that the NMSC term be extended to the beginning of 2021, acknowledging the likelihood that further work will be required by the sub-committee through 2021 and into 2022. It is with the optimistic anticipation that the PortsToronto will agree to continue to fund this important sub-committee for the duration. The sub-committee agreed to review the TOR as well as discussions, learning, and work completed in 2020 during the first meeting of 2021 to be held in January.

Looking Forward

In the upcoming year, members of the NMSC anticipate fulfilling the mandate of the subcommittee through the following tasks:

- **Ground Noise Study (Implementation and Analysis)** – Beginning in January 2020, R.J. Burnside will begin their study of ground noise generated by BBTCA, developing a noise model for the airport including variables associated with weather and where noise is generated. The NMSC has expressed interest in continued input and discussion with airport management and the consultant to ensure the study accurately captures noise conditions experienced around the airport with the goal of informing prioritized mitigation measures to reduce noise exposure in nearby communities.
- **Permanent Noise Management Monitor Installation** – BBTCA airport management will continue to facilitate the expansion of the Permanent Noise Management Monitors including a new permanent noise monitor on the Kings Landing Condominium building. A second new permanent monitor will be installed at Ontario Place, as will the relocation of an existing permanent monitor from the mainland ferry terminal to Windward Coop building. The NMSC has

expressed interest in discussing how the collected data is filtered, presented, and assessed with respect to community impacts.

- **Annual Noise Management Report (ANMR)** – The NMSC will review the draft 2019 Annual Noise Management Report to provide feedback on the adequacy of data presentation and any potentially misleading information which can contribute to community mistrust and lack of confidence.
- **Researching Information on Noise and Improving Noise Literacy** –
    - The City of Toronto's Waterfront Secretariat has expressed their willingness to present on the City's Noise Study Requirements for new buildings.
    - The NMSC expressed interest in discussing topics such as: the technical criteria applied for assessing noise effects under federal and provincial EA processes; why and how aircraft slots are regulated and the related implications for fly-by noise impacts on the community; an overview of TP1247 and the purpose of NEF noise modelling; and the principles and assumptions underlying the NEF formula and understanding the noise level established by an NEF value.

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Appendix A

PortsToronto Noise Management Subcommittee Terms of Reference July 2020

Billy Bishop Toronto City Airport Noise Management Subcommittee

Terms of Reference July 2020

1. ROLE

The Billy Bishop Toronto City Airport (BBTCA) Noise Management Subcommittee is accountable to the Billy Bishop Airport Community Liaison Committee. The Noise Management Subcommittee will provide a forum to communicate the perspectives and concerns of nearby residents to airport management regarding airport related noise. It will also be a forum to improve literacy and understanding of technical noise issues. Further, it will enable airport management to communicate and discuss proposals, planning issues and other relevant information back to stakeholders and the broader community regarding airport related noise. All Noise Management Subcommittee members shall respect and understand their role and the process of reporting through the Community Liaison Committee.

2. MANDATE

The Noise Management Subcommittee will be an advisory body to the BBTCA Community Liaison Committee and the BBTCA Director, providing comments, feedback, recommendations, and advice on existing and planned airport noise associated with airport development, operations and activities, including but not limited to:

- Noise related to flyby noise, airport stationary source noise (includes ferry and supply truck noise), and airport maintenance activities
- Noise both on the airport lands and in the community associated with airport operations and development

3. COMPOSITION

3.1 Membership

The Noise Management Subcommittee will be comprised of members who are generally representative of the Toronto waterfront community in the vicinity of or in the noise envelope of the BBTCA. The subcommittee will include persons representing the interests of waterfront residents as they pertain to noise generation and propagation on the airport lands and in the community.
Noise Management Subcommittee members are guided by these 'Terms of Reference' and participate on the subcommittee at the pleasure of BBTCA.

The subcommittee will consist of the following members:

- Hal Beck (Co-Chair) – York Quay Neighbourhood Association member
- Angela Homewood (Co-Chair) – PortsToronto
- Bryan Bowen – City Planning, Waterfront Secretariat
- Gary Colwell - PortsToronto
- Max Moore - Bathurst Quay Neighbourhood Association member
- Lesley Monette –Bathurst Quay Neighbourhood Association member (King's Landing Noise Committee Chair)

City Council or staff from the Councillor's office are welcome but not required to attend, as they have representation on the CLC, to which this subcommittee reports. Further, the City of Toronto staff representative can brief the Councillor and staff if required.

3.1.1. Alternates

If necessary, members may nominate an alternate from their organization to attend Noise Management Subcommittee meetings in their place, provided that such alternates are briefed on meetings to date.

3.1.2 Recommendations for Community Representatives

It is recommended that the following principles and criteria be adhered do by members of the Noise Management Subcommittee:

Guiding Principles

The following principles will be applied to recommending Noise Management Subcommittee members;

Openness: The opportunity should be open to all waterfront and BBCTA area residents, that live in the vicinity of BBTCA.

Transparency: The Noise Management Subcommittee terms of reference, role and expected time commitment should be made clear to those who are interested.

Commitment: Community Members will be recommended based on their willingness and commitment to work productively with the BBTCA and the community to seek solutions to the noise agenda items that will be brought before this subcommittee.

Recruitment

Members of the Community Liaison Committee will recommend alternate community representatives, if required at the quarterly Community Liaison Committee meetings.

Criteria

Noise Management Subcommittee membership will be open to those who:

- Are interested in working productively with the BBTCA on two-way communications between the BBTCA and their community of interest, business or institution;
- Are interested in understanding the technical aspects of noise generation, propagation, quantification, assessment, and/or mitigation;
- Agree to solicit input and feedback from the broader communities they represent;
- Can demonstrate effective participation in community, consensus-based discussions;

- Can commit to meeting a minimum of 4 times a year and on an as agreed upon basis by the subcommittee; and
- Agree to participate on the subcommittee in accordance with this Terms of Reference.

Attached: Community Liaison Committee Protocol

3.1.3 Facilitators

PortsToronto shall provide a neutral, third-party facilitator to help guide the conversations at each Noise Management Subcommittee. The facilitator is directed to maintain communication with the Noise Management Subcommittee members about planning upcoming meetings, facilitate each meeting, record meeting minutes, and draft a summary of the meeting for review by members of the subcommittee. The facilitators of the Noise Management Subcommittee are as follows:

- Jim Faught – LURA Consulting (Facilitator)
- Alexander Furneaux – LURA Consulting (Notetaking & Coordination)

3.2 Term

The existence of the Noise Management Subcommittee will be reevaluated on an annual basis through the preparation of a summary of the Noise Management Subcommittee's accomplishments of the course of the preceding year. The annual review will function as a plain-language overview of the Noise Management Subcommittee's key discussions and areas of learning to be shared with the Community Liaison Committee and the members of the neighbourhood associations that sit on the Community Liaison Committee.

The annual review will be discussed at the first meeting of the Noise Management Subcommittee in the year and will be presented to the PortsToronto Community Liaison Committee at their second meeting of each year. During this annual review, the Noise Management Subcommittee as a whole will decide whether or not to renew its mandate. The next review of the Noise Management Subcommittee's mandate is scheduled for the first meeting in 2021.

If there is a desire for the Noise Management Subcommittee to continue with a new mandate, a new terms of reference would be required. The focus of the Noise Management Subcommittee is to fulfill the mandate outlined in this terms of reference.

If a member is absent for two consecutive meetings, that member will be contacted to discuss their participation on the Noise Management Subcommittee and asked to withdraw if a subsequent absence should occur. Members will notify the Co-Chairs if they wish to withdraw from the Noise Management Subcommittee for any reason. Vacant positions will be filled as soon as possible.

3.3 Resource Representatives

Resource representatives will be available to the Noise Management Subcommittee on an as-required basis, as determined by the Noise Management Subcommittee. Resource representatives will be invited by the Chairperson to attend specific Noise Management Subcommittee meetings where their experience or expertise will be of interest or add value to the Noise Management Subcommittee's deliberations.

Resource representatives are expected to include:

- Noise and acoustic experts
- Transport Canada regional staff representatives
- NAV Canada staff representatives
- PortsToronto or Airport staff
- Wayne Christian - Remote advisory and weather resource
- Other City of Toronto, provincial or federal government staff

From time to time, the Noise Management Subcommittee may request the attendance of other relevant noise expert representatives from other BBTCA stakeholders to attend the Noise Management Subcommittee meetings for the purposes of providing or receiving information or seeking staff input and recommendations.

4 ROLES AND RESPONSIBILITIES

4.1 Subcommittee Members

Noise Management Subcommittee members will:

i) Be responsible for soliciting input and feedback from the broader constituencies and communities they represent, and for sharing this with the Noise Management Subcommittee.
ii) Provide advice, feedback and perspectives related to noise, on questions, proposals or other matters provided by BBTCA management or the community.
iii) Communicate Noise Management Subcommittee discussions and outcomes backto their organizations, communities and constituencies.
iv) Communicate advice and recommendations developed by the subcommittee to the BBTCA Community Liaison Committee.
v) Attend meetings as required, and brief an alternate when necessary.
vi) Review the minutes to ensure that proceedings have been accurately documented.

4.2 BBTCA Management

BBTCA management commit to:

i) Provide accurate, understandable information to Noise Management Subcommittee members, such that members can contribute informed advice andrecommendations.
ii) Help the Noise Management Subcommittee function effectively by providing information, and offering suggestions and alternatives to address issues, concerns and problems being discussed.
iii) Ensure that the appropriate staff or related experts with specific noise related expertise are present at discussions on specific noise issues or matters to assist the Noise Management Subcommittee with information and technical needs.
iv) Listen carefully to advice and perspectives of members and where feasible and appropriate, initiate action to address Noise Management Subcommittee recommendations that have been agreed to by the BBTCA Community Liaison Committee, or are otherwise required in absence of a committee.
v) Provide appropriate, relevant materials to Noise Management Subcommittee members for review in advance of meetings.
vi) Provide secretarial support for the Noise Management Subcommittee.

5 OPERATING PROCEDURES

5.1 Subcommittee Meetings

The Noise Management Subcommittee will attempt to meet bi-monthly. The Noise Management Subcommittee may meet more frequently, as required and generally in advance of planned BBTCA CLC meetings. Meetings will generally be held in the evenings, with duration of no more than two (2) hours. Meetings will be held at venues that are acceptable to the Noise Management Subcommittee. Meetings will be open to the public, at the discretion of the Noise Management Subcommittee.

Meeting agendas will be developed by the Chairperson, in consultation with Noise Management Subcommittee members.

5.2 Method of Operation and Disbandment

The Noise Management Subcommittee will operate on a consensus-based approach to provide advice and recommendations to PortsToronto and the BBTCA. The consensus approach is defined as the majority of members will be in general agreement on issues, advice and recommendations. If consensus is not achieved, differing perspectives and feedback will be reported in the Noise Management Subcommittee minutes. Given this, the Noise Management Subcommittee is not responsible for making decisions or passing motions regarding BBTCA or its operations. Decision of the subcommittee will not be legally binding on the BBTCA or PortsToronto.

The Noise Management Subcommittee will disband at the discretion of the Noise Management Subcommittee, once there are no noise related topics of interest brought forward by the subcommittee members or BBTCA and it is determined through discussion that the Noise Management Subcommittee has fulfilled the intend of its mandate. Reasons for disbanding will be given in writing, in the final meeting summary.

5.3 Meeting Management and Reporting

Meeting agendas and supporting materials will be circulated to Noise Management Subcommittee members at least two weeks in advance of meetings, to enable members to prepare fully and seek input or advice from their organizations, noise experts or their constituencies. Meeting minutes will be circulated to members within two (2) weeks of each meeting. Minutes are subject to approval by members at the following meeting. Final Noise Management Subcommittee minutes will be posted on the PortsToronto website. The Noise Management Subcommittee will be provided with the services of an independent facilitator to help members achieve consensus on issues from time to time.

Given the technical nature of discussion anticipated, the notetaker may obtain electronic recordings of the proceedings, after receiving permission from committee members at the start of a meeting. The recording will not be shared with any other party, including BBTCA management, and will only be used for the purpose of ensuring accurate notes. The recording will be destroyed once the notes are finalized and no later than 3 months following the date of the meeting.

5.4 Conflict of Interest

Members, resource representatives and experts must declare a conflict of interest prior to becoming a member of the Noise Management Subcommittee and/or at Noise Management Subcommittee meetings

or through correspondence, prior to addressing specific matters where an actual or perceived a conflict of interest may exist.

5.5 Communications and Media

Noise Management Subcommittee members will abide by the BBTCA Community Liaison Committee Meeting Protocol and Procedures (Attached as Appendix A).

PortsToronto will establish a section for the Noise Management Subcommittee on its website to publish relevant documents (including meeting agendas and minutes) and to encourage feedback from non-members.

5.6 Funding

The annual operational costs of the subcommittee will be paid for by PortsToronto. No stipends or fees will be paid.

APPENDIX A

Airport Community Liaison Committee
Meeting Protocol and Procedures
February 16, 2011

This Meeting Protocol expands upon the approved Airport Community Liaison Committee Terms of Reference (October 19, 2010) and is intended to guide the Chair and Committee members in conducting quarterly meetings of the Committee.

1. Chair

- Committee meetings will be chaired by the CEO of the Toronto Port Authority or designate.
- The Chair will open and adjourn each meeting. In consultation with members, the Chair will determine whether a meeting's duration should be lengthened or shortened.
- The Chair will seek members' approval of the agenda and meeting minutes.
- It is the Chair's responsibility to ensure that this Meeting Protocol is followed.

2. Facilitator

- On behalf of the Committee, the Chair may request the services of an independent facilitator to help members achieve consensus on particular issues.
- The independent facilitator will lead Committee discussions in an impartial manner.
- The facilitator will prepare minutes of Committee meetings, as requested by the Chair/Committee.

3. Agendas

- A draft meeting agenda and supporting materials will be circulated to members at least two (2) weeks in advance of each meeting, to enable members to prepare fully and seek input or advice from their organizations or constituencies.
- The Chair, in consultation with the independent facilitator, will develop draft agendas.
- Members will review and approve the agenda at the outset of each meeting.
- Members will be consulted on agenda items for subsequent meetings at the conclusion of each meeting.

4. Conflict of Interest

- Members must declare a conflict of interest prior to addressing specific matters or agenda items where an actual or perceived conflict of interest may exist.

5. **Mode of Operation**

- A consensus-based approach – where members seek general agreement on issues and recommendations – will be the operating mode for the Committee.
- If consensus is not achieved, differing perspectives and feedback will be reported in the minutes.
- The Committee is not responsible for making decisions, voting or passing motions regarding the Airport or its operations.

6. **Meeting Time and Duration**

- Meetings will generally be held in the evenings, with a duration of no more than three (3) hours.

7. **Public Access**

- A portion of each meeting (duration to be confirmed) will be open to the public.
- Fifteen (15) minutes will be set aside for public deputations at each meeting. All deputations must be requested in writing and received two (2) weeks in advance by TPA.
- Public seating is on a first come first served basis.

8. **Media**

- Media may attend the public portion of each meeting.
- Members are free to respond to media requests for comment on Committee matters, as they deem appropriate. A summary of comments made to the media regarding Committee matters must be provided [in advance] to TPA for distribution to all Committee members.

9. **Minutes**

- Meeting minutes will be circulated to members within two (2) weeks of each meeting.
- Minutes are subject to approval by members at the following meeting. Final minutes and copies of presentations will be posted on TPA's website.
- Minutes will include: a synopsis of Committee discussions and recommendations; action items; list of members in attendance.

Appendix B

Researching Information on Noise and Improving Noise Literacy
Presentation Attachments

Ministry of the Environment, Conservation and Parks (MECP)

Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning Publication NPC-300

July 2019
Header Merza, P.Eng.
Senior Noise Engineer

Ontario

Publication NPC-300 replaced the following four publications:

- Publication LU-131 – Noise Assessment Criteria in Land Use Planning. October 1997;
- Noise Assessment Criteria in Land Use Planning: Requirements, Procedures and Implementation. October 1997;
- Publication NPC-205 – Sound Level Limits for Stationary Sources in Class 1 and 2 Areas (Urban). October 1995; and
- Publication NPC-232 – Sound Level Limits for Stationary Sources in Class 3 Areas (Rural). October 1995.

Publication NPC-300 is organized into three main parts:

- Part A: provides material that is common and applicable to the whole document, such as purpose, definitions, common principles and references.
- Part B: specifically addresses the approval and compliance of stationary sources of noise.
- Part C: deals with the planning of new noise sensitive land uses.

Part A is integral to both Part B and Part C.

All three parts are interrelated and need to be considered together.

Part A

BACKGROUND

Publication NPC-300 provides:

- Sound level limits that are applied by the MECP to stationary sources, such as industrial and commercial establishments and auxiliary transportation facilities.
- Advice, sound level limits and guidance that may be used when land use planning decisions are made. The MECP has no authority under the Planning Act and has no direct role in the land use planning process.
- Sound level limits that may be incorporated into noise control by-laws, which may be developed by municipalities.
- Sound level limits that may be applied in licensing and permitting activities for aggregate resource extraction activities.

Publication NPC-300 does not provide sound level limits for:

- Blasting in quarries and surface mines
- Wind turbine facilities
- Landfills
- New or expanded transit corridors

Definitions

“Acoustic barrier”

- ground-based / permanent barriers – minimum mass surface density 20 kg/m2
- rooftop / temporary barriers – minimum mass surface density 10 kg/m2

“Agreement for noise mitigation”

- one, or multiple, legally binding agreements involving parties such as land use planning authorities, proponents of a noise sensitive land use and owners of a stationary source.
- Agreement(s) may be associated with decisions made by the land use planning authority under the Planning Act or established as collateral agreements.
- The need for the agreement(s) is triggered by the use of receptor based noise control measures to ensure compliance with the applicable sound level limits. The finalized agreement(s) are to be submitted by the stationary source with any application for an MECP approval.

Definitions (Cont.)

The agreement should:

- ensure that the stationary source is able to comply with the applicable sound level limits at the new noise sensitive land use;
- provide assurance that receptor based noise control measures are implemented and maintained;
- provide consistency for planning noise sensitive land use(s) in the proximity of stationary source(s);
- address the long-term responsibilities of all the parties to the agreement; and
- describe the noise control measures and provide information about how these measures will result in compliance with the applicable sound level limits.

Definitions (Cont.)

“Background sound level”

- the sound level that is present in the environment, produced by noise sources other than the source under impact assessment;
- typically caused by road traffic;
- sound from existing adjacent stationary sources may be included in the determination of the background sound level if such stationary sources have the appropriate approvals and are not under consideration for noise abatement by the municipality or the MECP;
- highly intrusive short duration noise caused by an aircraft flyover or a train pass-by is normally excluded from the determination of the background sound level; and
- under unique/special circumstances, train pass-by noise may be included in the determination of the background sound level in accordance with specific conditions and procedures.

Definitions (Cont.)

"Class 1 area"

- an area with an acoustical environment typical of a major population centre, where the background sound level is dominated by the activities of people, usually road traffic, often referred to as "urban hum."

"Class 2 area"

- an area with an acoustical environment that has qualities representative of both Class 1 and Class 3 areas:
  - sound levels characteristic of Class 1 during daytime (07:00 to 19:00 or to 23:00 hours); and
  - low evening and night background sound level defined by natural environment and infrequent human activity starting as early as 19:00 hours (19:00 or 23:00 to 07:00 hours).

Definitions (Cont.)

“Class 3 area”

- a rural area with an acoustical environment that is dominated by natural sounds having little or no road traffic, such as:
  - a small community;
  - agricultural area;
  - a rural recreational area such as a cottage or a resort area; or
  - a wilderness area.an area or specific site that would otherwise be defined

Definitions (Cont.)

“Class 4 area”

- an area or specific site that would otherwise be defined as Class 1 or 2 and which:
  - is an area intended for development with new noise sensitive land use(s) that are not yet built;
  - is in proximity to existing, lawfully established stationary source(s); and
  - has formal confirmation from the land use planning authority with the Class 4 area classification which is determined during the land use planning process.

Areas with existing noise sensitive land use(s) cannot be classified as Class 4 areas.

Definitions (Cont.)

“Enclosed noise buffer”

- an enclosed area outside the exterior wall of a building such as an enclosed balcony specifically intended to buffer one or more windows of noise sensitive spaces. In order for the concept of enclosed noise buffer to be acceptable within the context of an MECP approval of stationary sources, it can only apply to high-rise multi-unit buildings in a Class 4 area.

“High-rise multi-unit building”

- a residential building with four or more floors (storeys) and with more than one dwelling per floor (storey).

“Inoperable (fixed or sealed) window”

- an exterior window that is acoustically designed to provide a suitable indoor acoustical environment for occupants of new noise sensitive land uses. The inoperable window is a receptor based “on building” noise control measure.

Definitions (Cont.)

"NEF/NEP"

- Noise Exposure Forecast/Noise Exposure Projection contours for airports.

"Noise control measure"

- may include, but are not limited to, the following:
  - source based noise control measures
  - receptor based outdoor noise control measures
  - receptor based "on building" noise control measures
  - receptor based site configuration noise control measures
  - receptor based site construction and architectural noise control measures

"Noise sensitive commercial purpose building"

- 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

Definitions (Cont.)

"Noise sensitive institutional purpose building"

- 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. A place of worship located in commercially or industrially zoned lands is not considered a noise sensitive institutional purpose building.

"Noise sensitive zoned lot"

- a lot or a property of a person that has been zoned to permit a noise sensitive land use and that is either:
  - currently vacant; or
  - has an existing land use that is not a noise sensitive land use.

"Outdoor Living Area (OLA)"

- applies to transportation sources

"Point of reception (POR)"

- applies to stationary sources

Definitions (Cont.)

“Predictable worst case noise impact”

- the noise impact associated with a planned and predictable mode of operation for stationary source(s), during the hour when the noise emissions from the stationary source(s) have the greatest impact at a point of reception, relative to the applicable limit. It addresses the following activities:
  - regular, routine operation of equipment;
  - infrequent operation of equipment; and
  - operation of emergency equipment.

Definitions (Cont.)

“Stationary source”

- stationary sources subject to Part B of Publication NPC-300:
  - aggregate extraction facilities (except blasting);
  - auxiliary transportation facilities;
  - commercial facilities;
  - industrial facilities;
  - natural gas facilities;
  - repair or storage garages for public vehicles;
  - storage, maintenance and repair facilities;
  - warehousing and truck terminal facilities; and
  - works yards.

  The stationary source is understood to encompass all the activities taking place within the property boundary of the facility.

Definitions (Cont.)

- stationary sources exempted from Section 9 of the EPA in O. Reg. 524/98:
  - car washes;
  - HVAC systems (subject to certain qualifiers);
  - mobile equipment for crushing or screening of aggregate, if it located below grade in a pit or quarry that is operated in accordance with a licence or permit issued under the Aggregate Resource Act;
  - outdoor firearm ranges / gun clubs;
  - race tracks;
  - schools / private schools;
  - snow disposal sites; and
  - standby power systems (subject to certain qualifiers).

  Sources in this category are also subject to the sound level limits in Part C of Publication NPC-300.

Definitions (Cont.)

- stationary sources under the jurisdiction of Ontario Ministry of Agriculture, Food and Rural Affairs:
  - pest-scaring devices;
  - wind machines used to protect agricultural crops;
  - irrigation pumps used for horticultural, field or nursery crops
  - equipment used for food crop seeding, chemical spraying or harvesting;
  - Building HVAC equipment used in livestock, greenhouse, horticultural and other facilities;
  - on-farm anaerobic digesters used to generate clean energy that are exempt under Ontario Regulation 359/09;
  - on-farm processing by a farmer of the products produced primarily from the farmer's agricultural operation such as grain dryers, grain aeration fans and hay dryers; and
  - other stationary sources on agricultural operations during normal farm practice.

Definitions (Cont.)

Part B and Part C of Publication NPC-300 do not apply to the noise impact of stationary sources associated with agricultural operations during the course of normal farm practice which are addressed through the Farming and Food Production Protection Act, 1998, These sources do not require an MECP approval.

Definitions (Cont.)

- stationary sources that may not require an MECP approval. The following are examples of stationary sources that usually do not require an MECP approval because most aspects of the facility are solely regulated by the federal government:
  - federally-regulated railway yards;
  - airport facilities;
  - port facilities and marine shipping activities; and
  - nuclear facilities.

  Ancillary facilities to these sources may require MECP approval.

  Regardless of whether provincial approvals are required, these sources are subject to the sound level limits in Part C of this guideline.

Definitions (Cont.)

- sources not considered as stationary sources in the context of Part B and Part C of Publication NPC-300:
  - temporary construction activities;
  - transportation corridors, i.e., railways and roadways;
  - residential air conditioning devices;
  - gas stations;
  - auditory warning devices required authorized by law;
  - back up beepers' on construction equipment or other vehicles;
  - occasional movement of vehicles on the property; and
  - parking lots for private passenger vehicles at offices, commercial facilities, employee parking and commuter parking lots.

Definitions (Cont.)

Sources not considered as stationary sources in the context of Part B and Part C of Publication NPC-300 and that are normally addressed in a qualitative manner in municipal noise by-laws:

- ringing of bells or gongs and the blowing of horns or sirens or whistles, or the production, reproduction or amplification of any similar sounds by electronic means;
- animals kept as domestic pets such as dogs barking;
- tools and devices used by occupants for domestic purposes such as domestic power tools, radios and televisions;
- domestic situations such as domestic quarrels, noisy parties;
- gathering of people at facilities such as restaurants, fairs and parks; and
- essential services and maintenance of public facilities such as, roadways, parks and sewers, snow removal, road cleaning, road repair and maintenance, lawn mowing and maintenance, sewage removal, garbage collection.

Definitions (Cont.)

- sources not requiring noise impact assessment:
  - sources, equipment, activities or facilities connected with emergency measures undertaken for:
    - the immediate health, safety or welfare of inhabitants; and
    - the preservation or restoration of property; unless such noise is clearly of a longer duration or nature more disturbing than is reasonably necessary for the accomplishment of such emergency purpose.

These sources are exempt from the application of the limits in Part B and Part C of Publication NPC-300.

Definitions (Cont.)

"Time periods" (applicable to stationary sources)

- "Daytime": is the 12-hour period between 07:00 and 19:00 hours;
- "Evening": is the 4-hour period between 19:00 and 23:00 hours; and
- "Nighttime": is the 8-hour period between 23:00 and 07:00 hours.

"Time periods" (applicable to transportation sources)

- "Daytime": is the 16-hour period between 07:00 and 23:00 hours; and
- "Nighttime": is the 8-hour period between 23:00 and 07:00 hours.

Part B

STATIONARY SOURCES

- Part B pertains to MECP approvals for noise emissions from stationary sources.
- It is the responsibility of the owner of a stationary source to comply with the applicable sound level limits.
- The sound level limit is set as the higher of either the applicable exclusion limit, or the minimum background sound level.
- Leq(1h) and L_{Lm} are sound level metrics used for approval and complaint investigation of stationary sources.

Exclusion Limits for Steady and Varying Sound

Table B-1
Exclusion Limit Values of One-Hour Equivalent Sound Level (L_{eq}, dBA)
Outdoor Points of Reception

Time of Day	Class 1 Area	Class 2 Area	Class 3 Area	Class 4 Area
07:00 – 19:00	50	50	45	55
19:00 – 23:00	50	45	40	55

Table B-2
Exclusion Limit Values of One-Hour Equivalent Sound Level (L_{eq}, dBA)
Plane of Window of Noise Sensitive Spaces

Time of Day	Class 1 Area	Class 2 Area	Class 3 Area	Class 4 Area
07:00 – 19:00	50	50	45	60
19:00 – 23:00	50	50	40	60
23:00 – 07:00	45	45	40	55

Exclusion Limits for Impulsive Sound

Table B-3
Exclusion Limit Values for Impulsive Sound Level (L_{LM}, dBAI)
Outdoor Points of Reception

Time of Day	Actual Number of Impulses in Period of One-Hour	Class 1 Area	Class 2 Area	Class 3 Area	Class 4 Area
07:00 – 23:00	9 or more	50	50	45	55
	7 to 8	55	55	50	60
	5 to 6	60	60	55	65
	4	65	65	60	70
	3	70	70	65	75
	2	75	75	70	80
	1	80	80	75	85

Exclusion Limits for Impulsive Sound (Cont.)

Table B-4
Exclusion Limit Values for Impulsive Sound Level (L_{LM}, dBAI)
Plane of Window – Noise Sensitive Spaces (Day/Night)

Actual Number of Impulses in Period of One-Hour	Class 1 Area (07:00–23:00)/ (23:00–07:00)	Class 2 Area (07:00–23:00)/ (23:00–07:00)	Class 3 Area (07:00–19:00)/ (19:00–07:00)	Class 4 Area (07:00–23:00)/ (23:00–07:00)
9 or more	50/45	50/45	45/40	60/55
7 to 8	55/50	55/50	50/45	65/60
5 to 6	60/55	60/55	55/50	70/65
4	65/60	65/60	60/55	75/70
3	70/65	70/65	65/60	80/75
2	75/70	75/70	70/65	85/80
1	80/75	80/75	75/70	90/85

Class 4 Area

The following considerations apply to new noise sensitive land uses proposed in a Class 4 area:

- formal confirmation of the classification by the land use planning authority;
- noise impact assessment should be conducted;
- noise control measures may be required;
- noise control measures may include receptor based noise control measures and/or source based noise control measures;
- source based noise control measures may require an MECP approval;
- warning clause Type F (Section C8.3) is recommended;
- agreement for noise mitigation; and
- existing noise sensitive land uses which may be classified as a Class 1 or Class 2 area would not be reclassified until these existing noise sensitive land uses are replaced, redeveloped or rebuilt.

Part C

Land Use Planning

- Provides guidance for land use planning purposes.
- Provides advice for land use planning authorities, developers and consultants to address environmental noise in the land use planning process.
- Provides assistance in creating compatibility between noise sensitive land uses and stationary sources with respect to noise.
- MECP has no authority under the Planning Act regarding the land use planning approval process.
- Relates to the transportation sources of noise and stationary sources of noise in the land use planning process.
- References sound level limits, feasibility and detailed noise impact studies and noise control measures.
- Describes responsibilities for ensuring sound level limits are met.

Outdoor Road and Rail Traffic Sound Level Limit

Table C-1
Sound Level Limit for Outdoor Living Areas
Road and Rail

Time Period	L_{eq} (16) (dBA)
16-hour, 07:00 – 23:00	55

Indoor Road and Rail Traffic Sound Level Limits

Table C-2
Indoor Sound Level Limits
Road and Rail

Type of Space	Time Period	L_{eq} (dBA)	
		Road	Rail
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	07:00 – 23:00	45	40
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	23:00 – 07:00	45	40
Sleeping quarters	07:00 – 23:00	45	40
	23:00 – 07:00	40	35

Outdoor Air Traffic Sound Level Limit

Table C-3
Outdoor Aircraft Noise Limit

Time Period	NEF/NEP
24-hour	30

Indoor Air Traffic Sound Level Limits

Table C-4
Indoor Aircraft Noise Limits
(Applicable over 24-hour period)

Type of Space	Indoor NEF/NEP*
Living/dining/den areas of residences, hospitals, schools, nursing/retirement homes, daycare centres, etc.	5
Sleeping quarters	0

* The indoor NEF/NEP values in Table C-4 are used to determine acoustical insulation requirements based on the NEF/NEP contour maps.

Supplementary Indoor Sound Level Limits Road and Rail

Table C-9
Supplementary Indoor Sound Level Limits
Road and Rail

Type of Space	Time Period	L_{eq} (Time Period) (dBA)	
		Road	Rail
General offices, reception areas, retail stores, etc.	16 hours between 07:00 – 23:00	50	45
Living/dining areas of residences, hospitals, schools, nursing/retirement homes, daycare centres, theatres, places of worship, libraries, individual or semi-private offices, conference rooms, reading rooms, etc.	16 hours between 07:00 – 23:00	45	40
Sleeping quarters of hotels/motels	8 hours between 23:00 – 07:00	45	40
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	8 hours between 23:00 – 07:00	40	35

Supplementary Indoor Sound Level Limits Air Traffic

Table C-10
Supplementary Indoor Aircraft Noise Limits
(Applicable over 24-hour period)

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

* The indoor NEF/NEP values listed in Table C-10 are not obtained from NEF/NEP contour maps. The values are representative of the indoor sound levels and are used as assessment criteria for the evaluation of acoustical insulation requirements.

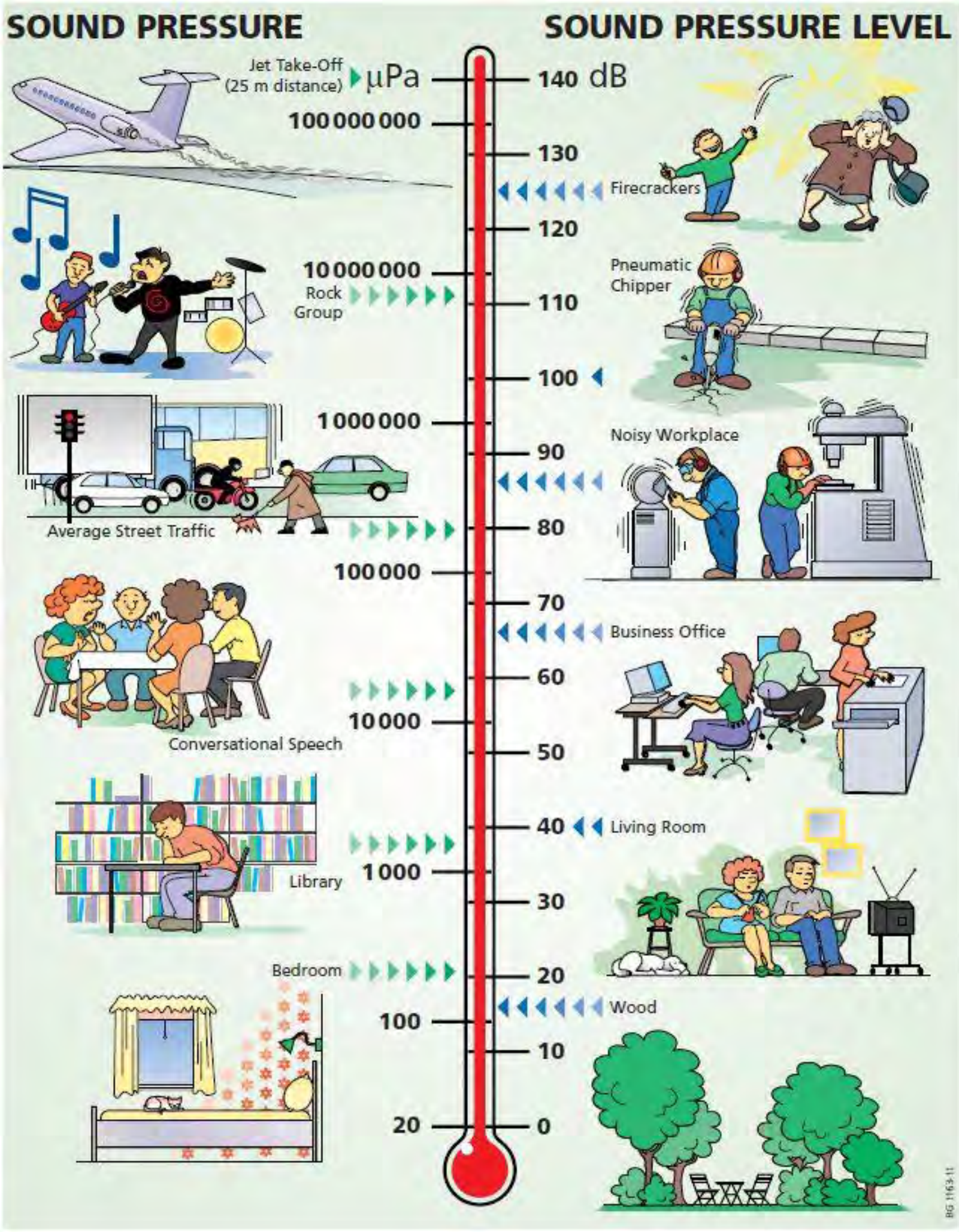
Noise Control Measures

- Outdoor Living Areas
  - Acoustic Barriers
- Plane of a Window – Ventilation Requirements
  - Provision for central air conditioning
  - Central air conditioning
- Indoor Living Areas – Building Components
  - Walls
  - Windows
  - Doors

Warning Clauses

- Type A (Exceedance of Sound Level Limits)
- Type B (Noise Control Measures)
- Type C (Provision for Central Air Conditioning)
- Type D (Central Air Conditioning)
- Type E (Stationary Source of Noise)
- Type F (Class 4 Area)

Appendix B – Noise Chart


SOUND PRESSURE
SOUND PRESSURE LEVEL
Jet Take-Off
(25 m distance)
µPa
100 000 000
140 dB
130
Firecrackers
120
10 000 000
Rock
Group
Pneumatic
Chipper
110
100
1 000 000
90
Noisy Workplace
Average Street Traffic
80
100 000
70
Business Office
60
10 000
Conversational Speech
50
40
Living Room
1 000
Library
30
Bedroom
20
Wood
100
10
20
0
BG 1163-11