**CITY OF HAMILTON**

**PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT**  
Planning Division

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<tr>
<th>TO: Chair and Members Planning Committee</th>
<th>WARD(S) AFFECTED: WARD 1</th>
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<tr>
<td>COMMITTEE DATE: April 17, 2012</td>
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<td>SUBJECT/REPORT NO:</td>
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<td>Applications for Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103(b)) (Ward 1)</td>
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<td>SUBMITTED BY:</td>
<td>PREPARED BY:</td>
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<td>Tim McCabe</td>
<td>Edward John</td>
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<tr>
<td>General Manager</td>
<td>(905) 546-2424, Ext. 5803</td>
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<tr>
<td>Planning and Economic Development</td>
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**RECOMMENDATION:**

That approval be given to Report PED09103, subject to the following changes:

(a) That Recommendation (b) (ii) of Report PED09103 be deleted in its entirety and replaced with the following:

“(ii) That the amending By-law apply the Holding provisions of Section 36(1) of the Planning Act, R.S.O. 1990 to the subject lands by introducing the Holding symbol ‘H’ as a suffix to the proposed Zoning District. The Holding provision will prohibit the development of the subject lands until such time as a Record of Site Condition (RSC), and approved Site Plan implementing the recommendations of the approved Noise Study, have been submitted, to the satisfaction of the City of Hamilton’s Director of Planning, including an acknowledgement of receipt of the RSC by the Ministry of Environment (MOE).”

Vision: To be the best place in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities.  
Values: Honesty, Accountability, Innovation, Leadership, Respect, Excellence, Teamwork
(b) That Section 3.b) of the Draft By-law, contained in Appendix “C” to Report PED09103, be deleted in its entirety and replaced with the following:

“b) That the owner shall implement the approved noise control measures through an approved Site Plan application that is satisfactory to the City of Hamilton in meeting the Ministry of the Environment’s recommended sound level limits, to the satisfaction of the City of Hamilton, Director of Planning.”

Committee Direction and Background:

Following a Public Meeting held to discuss the merits of a proposed Official Plan Amendment and change in zoning to permit the development of the lands for a 10-storey multiple residential building intended to be used for the purposes of student accommodation (see Appendix “B”), the Economic Development and Planning Committee, on April 21, 2009, deferred consideration of the Report pending the completion of a Noise Study, and recommended that the applicants, Auburn Developments and Cadbury Adams (now officially KRAFT Canada), meet and discuss the proposal.

On June 15, 2010, the item returned to the Economic and Development Committee in the form of an Information Report (Report PED09103(a) - see Appendix “C”). The Report outlined the work that had been completed by the applicant with respect to the initial direction from Committee regarding the noise issues.

Staff, through the analysis contained within the Information Report, concluded that in the absence of a complete and comprehensive Noise Study, they would continue to support the application, but maintain the recommendation for a Holding provision in order to ensure the said Study is conducted and completed, to the satisfaction of the City of Hamilton (see Appendix “C”).

Committee deferred the Report to the July 5, 2010, Committee meeting to allow time to digest all the additional information received from Cadbury (now officially KRAFT Canada) and the residents, to allow the Ward Councillor to meet with Auburn and with Cadbury (now officially KRAFT Canada), and to get staff’s opinion on purpose built student housing and its dynamics.

Prior to the Item returning to the July 5, 2010, Committee, the applicant requested the Item be deferred indefinitely, until further notice, in order that they may address more comprehensively, the issue of noise. This second Information Report subsequently highlights the additional work completed to date, and the resultant position of staff.
With regard to the dynamics of purpose built student housing, discussions with the Ward Councillor took place, and identified the varied, yet limited, amount of empirical evidence on purpose built student housing.

**Information:**

The subject lands comprise approximately 0.42 hectares (1.06 acres) within the Urban Area. The site is located in the block contained by Main Street West to the north, Rifle Range Road to the east, Ewen Road to the west, and Whitney Avenue to the south, with frontage directly along Ewen Road and Rifle Range Road, as shown on Appendix “A” to this Report. Notable surrounding uses include the former CNIB building (redeveloped to a 9-storey building for the purpose of student accommodation), the Cadbury Candy Factory (now officially KRAFT Canada) located immediately south of the subject property, and Fortinos located to the East.

The site currently maintains an industrial designation in the Hamilton Official Plan, the Ainslie Wood Secondary Plan, and the Hamilton Zoning By-law. The site was formally used as a warehouse facility, and remains occupied by two buildings which are proposed to be demolished in order to permit the proposed residential development.

The application would result in the conversion of the lands from their “Industrial” designation. This has been assessed through the City initiated Municipal Comprehensive Review, adopted by Council on June 25, 2008 (Report 08-022) and, as such, staff is satisfied that the conversion from this designation is appropriate. This is reflected in the New Urban Hamilton Official Plan, which has designated the property “High Density Residential 1” Special Policy Area “C”. The designation would support the location of a 10-storey residential building, with residential densities ranging between 300-375 units per hectare.

It is noted that the Urban Hamilton Official Plan received Ministerial Approval from the Ministry of Municipal Affairs and Housing on March 16, 2011, and, therefore, can no longer be modified.

However, the Urban Hamilton Official Plan has been appealed. As such, Council approved Official Plan Amendments made prior to the final decision will be held in abeyance until their incorporation into the Plan can be requested of the Ontario Municipal Board (OMB), or through a future housekeeping amendment.

The current proposal would consist of a 10-storey, purpose built student apartment building, providing approximately 150 units. The subject lands have frontage on both Rifle Range Road and Ewen Road, with access to the building provided from Rifle Range Road. A total of 195 parking spaces will be provided in two levels of underground parking (166 spaces) and surface parking (29 spaces). No access to the site is proposed from Ewen Road.
Staff supported the proposed applications on the basis of a Holding provision that would ensure both a comprehensive Noise Study and Record of Site Condition be completed. At the Economic Development and Planning Committee meeting of April 21, 2009, and based on the information presented by the adjacent landowners, Committee members, however, considered it prudent to have the information regarding noise prior to granting any approvals. Consequently, the item was deferred in order for this Study to be conducted, with particular emphasis on the ‘reflection’ of noise emitted by the Cadbury Plant.

The applicant provided additional analysis (see Appendix “C”) that was reviewed in the Information Report submitted to the Economic and Development Planning Committee on June 15, 2010. Within this Report, staff concluded that further revisions/analysis was required in order to more satisfactorily deal with the issue of noise.

Since that time, staff has received and peer reviewed two subsequent Noise Studies/Addendums.

- Novus Environmental - Environmental Noise Assessment, January 24, 2011 (see Appendix “D”).

- Peer Reviewed by JADE Acoustics May 2, 2011 (see Appendix “E”).

- Novus Environmental - Response to Peer Review Comments, September 23, 2011 (see Appendix “F”).

- Peer Reviewed by JADE Acoustics October 24, 2011 (see Appendix “G”).

The Environmental Noise Assessment, prepared by Novus Environmental (January 24, 2011 - see Appendix “D”), provided an assessment of the stationary noise impacts within the study area. Based on their measurements and noise predictions, applicable NPC-205 Guidelines were determined to be exceeded at existing noise sensitive receptors (a place of worship and residences) in the study area.

The Report indicates that based upon Publication LU-131, NPC-205 Guidelines may be exceeded at the proposed development. Given the excesses at existing receptors, the Report determined that it is not feasible to outline a source-based noise mitigation plan to reduce noise from Cadbury sources. Therefore, the Report concluded that in accordance with the provisions of LU-131, receptor-based noise mitigation, in the form of air-conditioning and sealed windows, be recommended.
Finally, the Report stated that given the existing conditions, including the presence of surrounding existing residential land uses, the conversion of the subject property to residential should not affect Cadbury’s ability to obtain or maintain their Certificates of Approval. The Report also concluded that the requirements of the City of Hamilton Noise Bylaw will be met, and similarly, the requirements of MOE Guidelines D-1 and D-6 will be met.

The initial Peer Review, conducted by JADE Acoustics May 2, 2011 (see Appendix “E”), on behalf of the City of Hamilton, identified a number of issues with the above Environmental Noise Assessment, prepared by Novus Environmental (January 24, 2011), and the subsequent conclusions drawn. These issues revolved predominately around the application of the MOE Guidelines, the need for additional investigation regarding ‘acoustical impacts’, and the use of sealed windows as a mitigation method.

In response to the issues identified by JADE Acoustics, Novus Environmental prepared a formal response (Response to Peer Review Comments, September 23, 2011) and provided additional information (see Appendix “F”). The Report outlined and responded to a number of areas of concern raised by the JADE Acoustics Peer Review, defending both the numerical assessment of impacts as well as defending the application of Guidelines. The Report concluded that the use of an Enclosed Noise Buffer (ENB) balcony (as opposed to sealed windows, as stated in the original report) would also adequately control noise impacts at the proposed residences, and would ensure that the noise level limits would be met at the affected noise-sensitive windows.

Following review of the second submission, prepared by Novus Environmental (September 23, 2011 - see Appendix “F”), JADE Acoustics provided written confirmation (October 24, 2011 - see Appendix “G”) that the provision of Enclosed Noise Buffer (ENB) balconies, as suggested by Novus Environmental, would be wholly satisfactory in addressing their previous stated concerns.

Based on the above, staff is satisfied that sufficient study has been conducted and adequate mitigation options determined through the information submitted to date. Staff acknowledges that the original staff Recommendation in Report PED09103 consisted of a Holding provision for both a Record of Site Condition and Noise Study. It is, therefore, staff’s position that the Recommendation be modified in order to recognize the above work and to secure the recommended design solutions within an approved Site Plan.

Conclusion

That the wording of the Holding provision, as detailed below, be modified to ensure the implementation of the design aspects of the approved Study.

Vision: To be the best place in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities.
Values: Honest, Accountability, Innovation, Leadership, Respect, Excellence, Teamwork
That Section (b) ii) of the original Recommendation within Report PED09103 be deleted and replaced with the following:

“That the amending By-law apply the Holding provisions of Section 36(1) of the Planning Act, R.S.O. 1990 to the subject lands by introducing the Holding symbol 'H' as a suffix to the proposed Zoning District. The Holding provision will prohibit the development of the subject lands until such time as a Record of Site Condition (RSC), and approved site plan implementing the recommendations of the approved Noise Study, have been submitted, to the satisfaction of the City of Hamilton’s Director of Planning, including an acknowledgement of receipt of the RSC by the Ministry of Environment (MOE).”

And further, that Section 3(b) of the Draft By-law contained in Appendix “C” of Report PED09103, be deleted and replaced with the following:

“That the owner shall implement the approved noise control measures through an approved Site Plan application that is satisfactory to the City of Hamilton in meeting the Ministry of the Environment’s recommended sound level limits, to the satisfaction of the City of Hamilton, Director of Planning.”

**APPENDICES / SCHEDULES**

- Appendix “A”: Location Plan
- Appendix “B”: Staff Report
- Appendix “C”: Information Report and Supplementary Noise Information
- Appendix “D”: Novus Environmental - Environmental Noise Assessment (January 24, 2011)
- Appendix “E”: Peer Reviewed by JADE Acoustics (May 2, 2011)
- Appendix “F”: Novus Environmental - Response to Peer Review Comments (September 23, 2011)
- Appendix “G” Peer Reviewed by JADE Acoustics (October 24, 2011)

:EJ
Attachs. (7)
Change in Zoning from the “J” Light and Limited Heavy Industrial, etc.) District to the “E-3”-“H” (High Density Multiple Dwellings – Holding) District and Official Plan Amendment from “Industrial to “High Density Residential”.
CITY OF HAMILTON

PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
Planning Division

Report to: Chair and Members Economic Development and Planning Committee
Submitted by: Tim McCabe General Manager Planning and Economic Development Department
Date: March 30, 2009
Files: ZAC-07-062 and OPA-07-016
Prepared by: Edward John (905) 546-2424, Ext. 5803

SUBJECT: Applications for Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103) (Ward 1)

RECOMMENDATION:

(a) That approval be given to Official Plan Amendment Application OPA-07-016, Auburn Developments Inc. (Jamie Crich), Owner, for Amendment No. 10 to the City of Hamilton Official Plan for changes in designations on Schedule “A” - Land Use Concept of the City of Hamilton Official Plan from “Industrial” to “Residential”, and to remove the lands from Schedule “B” - Special Policy Area of the City of Hamilton Official Plan, and on Schedule “N1” Land Use Plan, of the Ainslie Wood Secondary Plan in the City of Hamilton Official Plan from “Industrial” to “High Density Residential”, to permit a 10 storey multiple residential building, intended for the purpose of student accommodations, on lands located at 17 Ewen Road (Hamilton), as shown on Appendix “A” to Report PED09103, on the following basis:

(i) That the draft Official Plan Amendment, attached as Appendix “B” to Report PED09103, be adopted by City Council.

(ii) That the proposed Official Plan Amendment is consistent with the Provincial Policy Statement and conforms to the Hamilton-Wentworth Official Plan.

(b) That approval be given to Zoning Application ZAC-07-062, Auburn Developments Inc. (Jamie Crich), Owner, for a change in zoning from the “J” (Light and Limited Heavy Industry, Etc.) District, Modified, to the “E-3”-“H” (High Density Multiple Residential - Holding) District, Modified, to permit the development of a 10 storey multiple residential building, on lands located at 17 Ewen Road, as shown on Appendix “A” to Report PED09103, on the following basis:
SUBJECT: Applications for Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103) (Ward 1) - Page 2 of 21

(i) That the draft By-law, attached as Appendix "C" to Report PED00103, which has been prepared in a form satisfactory to the City Solicitor, be enacted by City Council.

(ii) That the amending By-law apply the Holding provisions of Section 36(1) of the Planning Act, R.S.O. 1990 to the subject lands by introducing the Holding symbol 'H' as a suffix to the proposed Zoning District. The Holding provision will prohibit the development of the subject lands until such time as a Record of Site Condition (RSC) and noise study have been submitted, to the satisfaction of the City of Hamilton’s Director of Planning, including an acknowledgement of receipt of the RSC by the Ministry of Environment (MOE).

(iii) That the proposed change in zoning is in conformity with the Hamilton-Wentworth Official Plan, and will be in conformity with the Hamilton Official Plan upon approval of Official Plan Amendment No. [Redacted].

Tim McCabe
General Manager
Planning and Economic Development Department

EXECUTIVE SUMMARY:

The purpose of these applications is to amend the City Of Hamilton Official Plan, Ainslie Wood Westdale Secondary Plan (see Appendix "B"), and to amend the City of Hamilton Zoning By-law No. 6593 (see Appendix "C"), to permit the development of the lands for a 10 storey multiple residential building intended to be used for the purposes of student accommodation. The building would consist of approximately 150 units on a 0.42 ha parcel of land.

As the proposal would require the conversion of a site currently designated Employment Lands, the City, in accordance with the Provincial Policy Statement (PPS) and Places to Grow Legislation, was first required to identify and assess the potential and acceptability of the conversion through a Municipal Comprehensive Review. This review was conducted as part of the Hemson Report, which concluded that the lands subject to this application were deemed appropriate for conversion. The current application, therefore, seeks to determine a detailed land use alternative for the site in the form of a high density residential building.
SUBJECT: Applications for Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103) (Ward 1) - Page 3 of 21

The proposal has merit and can be supported since the applications are consistent with the Provincial Policy Statement, and implement the intent of the Hamilton-Wentworth Official Plan. The proposal is compatible with surrounding uses, protects existing residential character and amenity, and is an appropriate development that will contribute to the range and density of residential opportunities within the City of Hamilton.

BACKGROUND:

Hemson Report / Municipal Comprehensive Review

The Provincial Policy Statement (PPS) requires that a ‘comprehensive review’ of all employment lands be accepted by a Council prior to any decision on private applications for re-designating industrial land to other uses. According to the PPS, a ‘comprehensive review’ must provide a technical basis for defensible employment land decisions.

Furthermore, the Places to Grow Plan similarly requires the municipality to identify areas/sites for potential conversion through the completion of a Municipal Comprehensive Review. The comprehensive review must ensure that any sites that are chosen for potential conversion do not impair the municipality’s ability to meet its employment targets, the viability of the employment area is not undermined, there is a need for the conversion, and the infrastructure can accommodate another use.

Consequently, the City retained Hemson Inc. to complete this review for City Wide industrial designated lands. The report provided by Hemson also provided key inputs into the City’s own “Growth Related Integrated Development Strategy” (GRIDS) and the related infrastructure master plans. Conclusions based upon this review indicated that the conversion of industrial lands at 17 Ewen Road, in particular, were both appropriate and desirable over the long term.

The official adoption of this Municipal Comprehensive Review is through the Province, as they are the legislative body that approves the City’s Official Plan. Based on preliminary discussions, it appears that a municipal comprehensive / conversion analysis review is deemed complete once the Official Plan has been amended to implement its conclusions. However, it is staff’s position that private development applications for the conversion sites should proceed since Council has approved the removal of the subject lands from the City’s employment land supply, and that the new Official Plan will not be adopted until June 2009, and may be subject to appeals to the Ontario Municipal Board (OMB).

As a consequence, staff is satisfied that the conversion of 17 Ewen Road represents an appropriate conversion of Industrial lands in accordance with the PPS and Places to Grow legislation, and that any recommendation upon these applications should proceed prior to the formal adoption of the Municipal Comprehensive Review / Conversion Analysis into the forthcoming Official Plan.
SUBJECT: Applications for Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103) (Ward 1) - Page 4 of 21

Proposal

The proposal would consist of a 10 storey purpose built student apartment building, providing approximately 150 units. The subject lands has frontage on both Rifle Range Road and Ewen Road, with access to the building provided from Rifle Range Road. A total of 195 parking spaces will be provided in two levels of underground parking (166 spaces) and surface parking (29 spaces). No access to the site is proposed from Ewen Road.

The proposal has been assessed against the “E-3” High Density Multiple Dwellings District and, as such, a number of modifications are required to accommodate the 10 storey residential building.

- Increase the maximum Gross Floor Area from 255% to 450%;
- Reduce the minimum West Yard Setback (Ewen Road) from 3.0m to 2.1m;
- Reduce the maximum North Yard Setback from 13.5m to 12.0m;
- Reduce the minimum South Yard Setback from 4.5m to 3.0m;
- Reduce the minimum East Yard Setback (Rifle Range Road) from 4.5m to 2.1m;
- Reduce the Minimum Required Landscaping from 40% to 15%;
- Reduce the Maximum Building Height from 18-storeys (57m) to 10 storeys;
- Omit the requirement for 2 loading spaces, whereas 2 are required; and,
- Permit parking to be located within the front yard.

These modifications, in addition to the merits of the Official Plan Amendment and Zoning By-law Amendment, will be discussed in detail in the Analysis/Rationale section of the report.

Details of Submitted Application

Owner/Applicant: Auburn Developments Inc. (Jamie Crich), Owner

Agent: GSP Group Inc.

Location: 17 Ewen Road
SUBJECT: Applications for Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103) (Ward 1) - Page 5 of 21

Description: 
Frontage: 125 metres
Lot Area: 0.42 hectares

EXISTING LAND USE AND ZONING:

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<td>Commercial</td>
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| South             |
| Industrial (Cadbury Building) | “J/S-1522” (Light and Limited Heavy Industry, Etc.) District, Modified. |

| East              |
| Commercial        | “H/S-1468a” (Community Shopping and Commercial, Etc.) District, Modified. |

| West              |

ANALYSIS/RATIONALE:

1. The proposed changes in Zoning and Official Plan Amendment have merit and can be supported for the following reasons:

   i) It is consistent with the Provincial Policy Statement and Places to Grow Legislation, and conforms to the Hamilton-Wentworth Official Plan.

   ii) It is compatible with the type and form of development in the surrounding neighbourhood.
SUBJECT: Applications for Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103) (Ward 1) - Page 6 of 21

iii) It is an appropriate development that will contribute to the range of residential options available to existing and future residents.

2. The subject lands comprise approximately 0.42 hectares (1.06 acres) of land within the Urban Area. The site is located in the block contained by Main Street West to the north, Rifle Range Road to the east, Ewen Road to the west, and Whitney Avenue to the south, with frontage directly along Ewen Road and Rifle Range Road. Notable surrounding uses include the former CNIB building (recently converted to a 9-storey building for the purpose of student accommodation), and the Cadbury Candy Factory located immediately south of the subject property. The site currently maintains an industrial designation in the Hamilton Official Plan, Ainslie Wood Secondary Plan, and the Hamilton Zoning By-law. The site was formally used as a warehouse facility, and remains occupied by two buildings which are proposed to be demolished in order to permit the proposed residential development.

As detailed previously, the conversion of the lands from their industrial designation has been assessed through a City initiated Municipal Comprehensive Review and, as such, staff is satisfied that the conversion from this designation is appropriate (see Page 3 - Background). With regard to the proposed use, staff considers that the form and intensity of residential development proposed is acceptable, and would be both compatible with the surrounding area and conform to the Official Plan policies regarding new residential developments (see Page 9 - Density and Streetscape Character for further analysis). With regard to the amending Zoning By-law, modifications to the “E-3” District have been requested to accommodate the proposed building with respect to setbacks, landscaping, Gross Floor Area, and parking/loading arrangements. These modifications are discussed in detail in the following sections of the report.

3. Staff notes that there are municipal combined storm and sanitary sewers and watermains available to service the subject lands. As detailed in the Functional Servicing Report provided by Stantec in June 2007, it is intended that the site be serviced for storm and sanitary sewers to the municipal combined sewer on Rifle Range Road. This will be reviewed in more detail at the time of development.

The existing road allowance width of Ewen Road is 15.2m (50 ft.), and Rifle Range Road is 20.12m (66 ft.). Therefore, no road allowance widenings are required at this time.

Given that the previous use of the lands was for industrial purposes, and that the proposed use is for residential, a mandatory filing of a Record of Site Condition will be required. Staff, therefore, recommends that the lands be placed within an ‘H’ Holding provision in order to ensure the lands, if necessary, are remediated.
SUBJECT: Applications for Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103) (Ward 1) - Page 7 of 21

In addition, due to the proximity of the subject lands to Main Street West (Arterial Road) and the adjacent industries and large scale commercial facilities, staff requests that a noise assessment be conducted to address this concern. This request will also form a part of the 'H' Holding provision attached to the subject lands in order to ensure any mitigation measures are appropriately accommodated.

Staff notes that the site is adjacent to the Hamilton-Brantford Rail Trail. The concept plan does not indicate any direct pedestrian connections to Ewen Road or Rifle Range Road, however, both Ewen Road and Rifle Range Road have direct trail access. It is considered that connectivity with respect to the trail system in and around this site should be reviewed and considered at the site plan stage.

4. In accordance with the new provisions of the Planning Act and the Council Approved Public Participation Policy, a Preliminary Circulation was sent to 52 property owners within 120 metres of the subject lands, and a public notice sign was placed on the property. A petition with approximately 300 names on it, and 15 formal letters, were received in response to the preliminary notice of circulation (attached as Appendix "E"). One letter was received in support of the proposal, and one letter was received from the Ainslie Wood / Westdale Community Association.

Many of the letters received stated concerns including the potential for anti-social behaviour as a result of the saturation of students; unacceptable increase in traffic and inadequate parking; loss of greenspace; negative impact on surrounding uses - particularly residential and commercial; loss of amenity from privacy, loss of views, overshadowing and excessive wind tunnelling; aesthetically damaging and incongruent impact when compared with existing low profile neighbourhood; unsuitable access from a side street; not in accordance with existing secondary plan; would lower property values and water pressures; negatively affect the environment; and concerns over the existing soil stability to maintain the building. Finally, concern was also raised over the potential of the building to be converted into condominiums in the future with sub-standard parking availability.

As detailed above, a letter was also received from the Ainslie Wood / Westdale Community Association. The letter stated concern over the scale and massing of the project and the adequate supply of parking. These issues raised will be discussed, in detail, in the following sections.

5. Anti-Social Behaviour:

Concerns have been raised with regard to the potential for increased anti-social behaviour following the 'saturation' of students into the area. In terms of land use, the Official Plan Amendment and Zoning By-law Amendment strictly provide
SUBJECT: Applications for Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103) (Ward 1) - Page 8 of 21

the opportunity under the Planning Act to evaluate the appropriateness of the proposed use - that of residential - as opposed to assessing any demographic stratification thereof. Consequently, any assessment based upon particular characteristics of a residential group, in this case students, would constitute a contravention to the Planning Act, in addition to other Legislative Acts.

However, staff notes that the impacts associated with the introduction of additional residents, facilitated through the high density form of development proposed, can be considered and assessed with respect to amenity, traffic, and overall character of the area. These issues will be addressed in the following sections.

6. Traffic/Safety and Parking Issues:

With respect to traffic, concerns from local residents included issues with both the increased volumes along the major and local streets in the vicinity of the proposed development, and also with the loss of parking within the area, particularly the residential neighbourhoods.

In addressing the issue of capacity, the application included a Traffic Impact Study, compiled by Paradigm Transportation Solutions Ltd. (February 2007). The study assessed current traffic conditions in the vicinity of the development, as well as developed estimates of the future traffic that will occur as a result of the proposed development. The study concludes that the site generated traffic, as a result of build-out of the subject site, is not expected to result in a noticeable change in the level of service at any of the intersections within the study area. In addition, it was noted that no traffic control signals are warranted for the intersection of Ewen Road and Main Street West, nor will any remedial measures be warranted in order to accommodate the site generated traffic.

Staff reviewed the impact assessment report and requested additional information regarding trip generation calculations. These concerns were addressed in a memorandum revision, submitted by Paradigm Transportation Solutions Ltd., in May 2008. Conclusions drawn from the revised calculations did not affect the original conclusions of the report and, as such, staff is satisfied that the proposal would not result in a significant impact upon existing traffic flows or pedestrian safety. Furthermore, in response to the concerns raised by local residents, the amending By-law will prohibit access to the subject lands from Ewen Road, which is not signalized (see Appendix "C"), ensuring access would be from Rifle Range Road, which is signalized, at Main Street West.

With regard to the impact upon parking, the proposal would include both surface parking (29 spaces) and underground parking (168 spaces), providing a total of 195 spaces. The number of spaces provided would exceed the number of spaces required for a 150 unit multiple dwelling in accordance with the parking requirements of Section 18A of By-law No. 6593 (1.25 spaces/unit = 188
SUBJECT: Applications for Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103) (Ward 1) - Page 9 of 21

spaces). However, staff acknowledge that based on the definition in the By-law, the proposal is not considered a student residence, but a multiple dwelling. Consequently, the parking standards are based upon the number of proposed dwelling units (150), and are not based on the total number of residents (600 students).

In response to this, residents have raised concerns which identify that, as a result of the intended demographic to reside at this location (all adults), there would be a greater pressure and demand upon parking. Staff considers that such pressure must be offset against both the provision of well serviced public transit and also the proximity of McMaster University to the subject lands. In addition, it must be noted that the ratio of parking available exceeds that provided on the recently developed student residence on an adjacent site (former CNIB). The ratio of parking spaces per unit for the former CNIB site is 0.98 parking spaces per unit, while the parking ratio for this proposal is 1.30 parking spaces per unit. In light of this situation, staff is satisfied that the parking provided would satisfactorily accommodate the proposed use.

In order to accommodate the development as proposed, the “E-3” District would require modifications to the number of required loading spaces, and would also need to be modified in order to permit parking in a required front yard. The standard “E-3” District requires provision of 2 loading spaces, however, the applicant has requested that no loading spaces be provided.

In the Planning Justification Report (and supplementary response submitted December 2008) provided by GSP Group in support of the application, they detail that the owners of the building (Auburn Developments) will operate a formal and regimented move in/out program for all tenants. The schedule consists of allocating a one-hour timeslot for each student, in which they are allowed to move into the building. This requires the temporary elimination of six surface parking spaces at the north side of the building, and access to an interior corridor and elevator. If a student misses this timeslot, they will be required to reschedule. Staff considers that this procedure, in addition to the fact that they will be providing 7 parking spaces above that required in the proposed District, will ensure that there remains, at all times, satisfactory parking and loading for the intended use.

In regard to the modification to permit parking in a required front yard, staff notes that the subject lands are considered a through lot (as it has frontage on both Rifle Range Road and Ewen Road). Consequently, under By-law 6593, the subject lands are considered to have two front yards. Under these circumstances, staff is satisfied that the modification can be supported, as it represents a technicality, which is not considered to have a significant nor detrimental impact upon the streetscape.
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Finally, in response to traffic issues, staff also notes that the south property line constitutes the approximate location designated in the City of Hamilton Master Trails Plan for the Hamilton-Brantford rail trail link. Discussions have taken place with staff and the two adjacent landowners, and it is considered the provision of the trail can be realized. Staff is, therefore, satisfied that discussions regarding easement/dedication for such a trail link can be addressed at the site plan stage and through further discussions with the adjacent landowner. The remaining traffic issues raised by staff concerning the development will be dealt with through the Standard Site Plan Process.

7. Density and Streetscape Character:

The subject lands are located within the Ainslie Wood Secondary Plan area, which is boarded by Highway 403 to the south, and is bisected by Main Street West, which runs through the centre of the neighbourhood. The predominant form of land use is residential, accompanied by a large portion of institutional to the north east (McMaster University). In addition to this, several large areas of parkland exist towards the periphery of the Plan Area; mixed use and commercial areas are located along either side of Main Street West; and an industrial pocket along Ewen Road and Riffle Range Road (which includes the subject lands).

The majority of the industrial area is occupied by the Cadbury Candy Factory located immediately south of the subject property. Immediately to the north, land uses include a number of commercial properties, including a fast food restaurant and car rental facility.

The proposal would consist of a 10 storey purpose built student apartment building, providing approximately 150 units, with a site area of approximately 0.42 ha. Given the height and subsequent density of development, concern has been raised with regard to the potential erosion of character of the surrounding residential neighbourhood.

In terms of policy framework, at the Provincial level, both the Provincial Policy Statement (PPS) and the Places to Grow (Growth Plan 2006) Legislation, which supplements the basic intent of the PPS, provides general directions towards guiding new development. With regard to the PPS, Policy 1.1.3.1 states the intent to focus growth in settlement areas. Similarly, the Growth Plan in Section 2.2.2.1 - Managing Growth, details that population and employment growth will be accommodated by directing it to built-up areas through intensification. The applications are, therefore, considered to be consistent with this legislation.

However, in terms of assessing the built form, character and particular merits of the proposal, staff must look toward the intent and policies of the Hamilton Official Plan in general, and the Ainslie Wood Westdale Secondary Plan in particular. As discussed previously, staff has committed to, and is satisfied with, the conversion of the lands from Industrial. Given Council’s position on the
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The subject lands the applicant has requested, through the proposed applications, the consideration of an alternative use of the site in the form of high density residential development. In this regard, the residential policies of the Hamilton Official Plan and Ainslie Wood Secondary Plan (in addition to other general policies of both documents) have been used to assess the compatibility of the proposal.

Policy A.2.1.8 states it is the intent of Council that a variety of housing styles, types, and densities be available in all residential areas of the City, and that development shall contribute to the desired mix of housing where practical. In this regard, staff considers that the proposal would further contribute to the variety in the type and density of development provided for within the City. Policy C.7.3 furthers this intent, detailing that regard must also be given to building height, setbacks, mass, and privacy of the existing residential area.

Staff considers that although the proposal would be 10 storeys in height, the mass of the building would be considerably mitigated through its design. The amending By-law shall incorporate as a requirement the two proposed "step-backs" on both ends of the building (those facing Ewen Road and Rifle Range Road), at the eighth and ninth/tenth floors. In addition, it should be noted that although setbacks and increases to the GFA would be required to facilitate this development, these modifications are supportable given that the land uses immediately surrounding the site consist of larger buildings used for either industrial or commercial purposes. Consequently, the height and subsequent density of development proposed is not considered to appear as incongruent as it would otherwise appear if it were abutting low profile residential areas.

On this matter, objections received identified a policy in the Ainslie Wood Secondary Plan (Policy 6.4.5 ix), which prescribes 4-6 storeys and that, therefore, at 10 storeys, this proposal would not be in accordance with the intent to maintain lower profile developments throughout the Secondary Plan. Staff notes that the intent for this policy is to guide development either side of Main Street West in order to facilitate mixed use development that would compliment the existing, low profile residential uses along Main Street West. The subject lands are, therefore, not considered to be inconsistent with this intent, given that it is not immediately adjacent to Main Street West, and that it is surrounded by commercial and industrial land uses, as opposed to low profile residential development.

In returning to the issue of density, staff notes that while the level of high density development proposed would exceed those general densities anticipated for this designation in the Secondary Plan (357 units per ha, as opposed to 50-125 units per ha), the overall impact would be both appropriate and acceptable given the proximity of the building to major transit corridors and transportation networks. In addition, it must be noted that given that this would be the only residential use within the front portion of the block of lands bounded by Ewen Road, Rifle Range
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Road, Whitney Avenue, and Main Street West, the cumulative impact of the density proposed is considerably mitigated. The Secondary Plan Policy regarding density calculations for this particular site will, therefore, be amended accordingly in order to permit the level of density proposed.

Finally, in terms of urban design, the concept plan and statement of intent provided by the applicant indicates that the materials used and site functionality will respect, and be sympathetic to, the surrounding area. The proposed reduction in landscaping, in particular, can be supported as it is considered the unique characteristics of the site, and that surrounding it can accommodate such a reduction without significant impacts upon the character or amenity of the area. Furthermore, staff will conduct further review of these details, including pedestrian and cycling connectivity, and ensure conformity with the design policies of the Secondary Plan, at the Site Plan stage.

8. Amenity:

In addition to the issues addressed above, given the scale and massing of the proposal, the applicant submitted a wind and sun-shadow assessment in support of the 10 storey residential building, in accordance with Policy 6.4.1.4 (I) of the Ainslie Wood Westdale Secondary Plan. The sun-shadow report concluded that while surrounding properties would be affected, the duration of impact would be limited to a few hours per day, and that no site would be affected for an entire day during the winter period. Furthermore, those uses most affected consisted primarily of the adjacent industrial and commercial uses. As such, staff is satisfied that the impacts illustrated within the sun-shadow study would not be unacceptable and would maintain sufficient and appropriate amenity for surrounding land uses.

With respect to the Pedestrian Wind Assessment (compiled by RWDI Consulting Engineers & Scientists, March 2006), the report concluded that no significant wind impacts are expected with build out of the building off-site, and that conditions are considered suitable for the expected usage of the area. It was also noted in the report that any potential impacts created would be further mitigated through the provision of landscaping including tall trees and grade level terraces. The elevational design and landscaping treatment implementing these measures will be addressed at the site plan stage.

The potential for surrounding residential areas to experience a loss of privacy as a result of the proposal is not considered significant. Uses immediately surrounding the building are either industrial or commercial and, as such, do not benefit from the same level of protection afforded to residential uses. Furthermore, the building will have its principle fenestrations directed towards Main Street West, and have also removed all previously proposed balconies to the rear (in order to satisfy stationary noise concerns emitted from the Cadbury Candy Factory located to the south). It is, therefore, considered that those
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residential areas in the vicinity of the building would not endure an unacceptable loss of privacy, given that they will be separated from the development by a mix of industrial and commercial uses and public streets.

With respect to the preservation of views, it is noted that while some existing views of the Escarpment would be interrupted, the extent of this impact upon the vista, given the location, orientation, and architectural design of the building, would not be significant.

Finally, consideration has been given to the prospective tenants of the proposed building with regard to the noise impacts that would be experienced as a result of the buildings proximity to adjacent industrial uses and arterial roads/highways. Staff has, therefore, recommended that the subject lands be placed under a “H” Holding provision in order to prohibit development until such point that a noise study has been submitted and approved, to the satisfaction of Director of Planning.

9. Use Compatibility:

As detailed previously, the conversion of the site and adjacent site from “industrial” to other uses has been examined and qualified through a Municipal Comprehensive Review. The conclusions drawn from that study identify this pocket of Industrial lands as suitable for conversion given the characteristics of the Industrial area currently existing and the range of uses surrounding. The Ainslie Wood Westdale Secondary Plan, while designating the area as Industrial, reflect these conclusions in their policies, which identify the increasing transition of these uses out of the area. In particular Policy 6.4.6 (i) makes reference to lands presently used for industrial purposes and states that these will be encouraged to convert to alternative uses in the long term. This trend has already been witnessed in the past within the Secondary Plan Area, including the current Fortino’s grocery store which was converted from previously zoned industrial land.

Staff is, therefore, satisfied that the viability of industrial development in and around this area has been assessed, and conclude that the phasing out and transition away from such uses is both appropriate and desirable. Those policies prescribed in the PPS and Places to Grow legislation, which relate to the protection of viable Industrial lands, therefore, do not conflict with staff’s position as all conditions for conversion have been satisfied.

Notwithstanding the above, the remaining industrial uses (in particular the Cadbury Candy Factory) will continue to operate and be recognized and permitted under a Special Policy Area. It is considered that given the requested noise study, both uses could function satisfactorily together despite their close proximity. With regard to existing commercial areas, it is considered that the influx of residents (and by virtue consumers) into the area, would result in a
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relationship that is both compatible and complementary. Finally, as discussed in previous sections, the proposed development is considered compatible with the range of residential uses in the surrounding area.

10. Open Space / Greenspace:

Staff does not consider the existing subject lands as greenspace and, as such, does not agree that the proposed development would result in any significant loss. Furthermore, it should be noted that several large parks and green open spaces exist within the Secondary Plan Area, and that these are well connected to the site by existing and proposed trails. Such provisions provide more than adequate amenity space for existing and proposed residents within the area.

In accordance with the City of Hamilton’s Parkland Dedication and Cash-in-Lieu of Parkland By-law, the application is subject to a parkland dedication, or a Cash-in-Lieu of parkland dedication payment. Therefore, in accordance with City By-laws, a cash payment to the City of Hamilton, in-lieu of the conveyance of the land, will be required prior to the issuance of a building permit for the proposed development. This will be required as a condition of Site Plan Approval.

11. Property Values and Soil Stability:

Finally, there are concerns related to the proposed development reducing the values of the existing properties in the neighbourhood. As noted earlier, the subject applications propose high density residential development in the form of purpose built student accommodation. Staff is not aware of any data that would support this opinion.

On the subject of soil stability, staff is not aware of any pre-existing condition that would suggest the development could not proceed based on existing soil conditions. Notwithstanding this, it is considered that the required building permit process provides sufficient safeguards to ensure the soil stability and structural soundness of the building.

**ALTERNATIVES FOR CONSIDERATION:**

If the application is denied, the applicant has the option of using the property for the current range of uses permitted in the "J-S/1522" (Light and Limited Heavy Industry, Etc.) District, Modified, which provides for a range of light industrial, manufacturing, and warehouse type uses.

**FINANCIAL/STAFFING/LEGAL IMPLICATIONS:**

Financial - N/A.

Staffing - N/A.
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Legal - As required by the Planning Act, Council shall hold at least one (1) Public Meeting to consider an application for approval of an Official Plan Amendment and change in Zoning.

Policies Affecting Proposal:

Provincial Growth Plan for the Greater Golden Horseshoe

The application has been reviewed with respect to the Provincial Growth Plan for the Greater Golden Horseshoe (Places to Grow). Staff considers the application to be consistent with the policies that manage growth and direct general residential intensification to the built-up areas, as per the Policies contained in 2.2.2 and 2.2.3.

Following completion of the Municipal Comprehensive Review, staff is satisfied that the conversion of lands designated as “Industrial” are appropriate and in accordance with Policy 2.2.6.

The proposal maintains the intent to create vibrant neighbourhoods, which provide residential uses that are transit supportive.

Provincial Policy Statement

The applications have been reviewed with respect to the Provincial Policy Statement (PPS). The applications are consistent with Policy 1.1.3.1 of the PPS, which focuses growth in settlement areas.

Also, Policy 1.7.1(e) outlines that long term economic prosperity will be supported by planning so that major facilities (such as airports, transportation corridors, sewage treatment facilities, waste management systems, industries and aggregate activities) and sensitive land uses are appropriately designed, buffered, and separated from each other to prevent adverse effects from odour, noise, and other contaminants, and to minimize risk to public health and safety. Due to the proximity of the subject lands to adjacent industrial uses, the Owner is required to conduct a noise assessment. The lands will subsequently be placed in an "H" Holding provision in order to ensure this study is conducted.

Policy 3.2.2 states that contaminated sites shall be remediated, as necessary, prior to any activity of the site associated with the proposed use such that there will be no adverse effects. Therefore, due to the fact the previous use of the site was for industrial purposes, and the proposed use is residential, Ontario Regulation 153/04 requires a mandatory filing of a Record of Site Condition (RSC) for the area. Staff has, therefore, recommended an 'H' Holding symbol in the zoning to ensure site remediation, and to ensure the proposal is consistent with the principles and policies of the PPS.


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Hamilton-Wentworth Official Plan

The subject property is designated as “Urban Area” within the Hamilton-Wentworth Official Plan. Policy 3.1 outlines that a wide range of urban uses, defined through Area Municipal Official Plans and based on full municipal services, will be concentrated in the Urban Areas.

Policy 3.1.1 states that a compact higher density urban form with mixed use development along corridors, best meets the environmental, social, and economic principles of sustainable development. Mixed form of development within an Urban Area is preferable to widespread, low density residential development, and scattered rural development.

Policy B-2.3 states that identification of contaminated sites is essential, and that redevelopment must not occur until it has been demonstrated that a proposal will not put people in significant risk. Subsequent sub-policies direct proponents to submit a professional analysis of soils on the site in accordance with Ministry of the Environment and Energy requirements. Staff has recommended an ‘H’ Holding symbol in the zoning to ensure site remediation, and to ensure the proposal conforms to the Hamilton-Wentworth Official Plan.

Hamilton Official Plan

The subject property is designated “Industrial” on Schedule “A”, Land Use Plan in the former City of Hamilton Official Plan and Special Policy 11 on Schedule “B” - Special Policy Areas. The proposal seeks to amend the designation to “Residential” and, as such, the following policies of the Hamilton Official Plan, among others, are applicable to the subject lands:

“A.2.3.12 Council will ensure that non-industrial land uses abutting GENERAL INDUSTRIAL areas are protected from any adverse impacts through the provision of adequate separation, screening, barriers, fencing, and landscaping or other like measures.”

Although the proposed residential development would abut an existing light industrial use (Cadburys), staff is satisfied that sufficient opportunity exists, given that this would be a new development, to investigate and implement any mitigation measures deemed necessary to protect against any adverse impacts. To ensure this is completed, staff has attached a Holding provision into the implementing By-law, restricting any development until such time as a noise study has been completed and the mitigation measures implemented.

“A.2.1.8 It is the intent of Council that a variety of housing styles, types, and densities be available in all RESIDENTIAL areas of the City, and further, that proposals for new development or redevelopment will contribute to the desired mix of housing where practicable. In this regard, Council will
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be guided by the Housing Policies of Subsection C.7 and the Neighbourhood Plan Policies of Subsection D.2."

"C.7.7.1 In the development of new RESIDENTIAL areas and, as far as practicable, in the infilling or redevelopment of established areas, Council may undertake or require the following in order to achieve high standards of RESIDENTIAL amenity:

i) Provision and maintenance of adequate off-street parking.

ii) Alteration of traffic flows.

iii) Improvement and maintenance of street landscaping.

iv) Acquisition, removal or improvement of buildings or uses incompatible with a zoning district.

v) Provision of advice and assistance in the improvement and maintenance of private dwellings.

vi) Investigation into, and application of, other methods of encouraging the maintenance and improvements of buildings in RESIDENTIAL areas.

vii) The maintenance of adequate separation distances and the placement of buffering features between RESIDENTIAL and Industrial uses.

viii) Other similar actions or matters as Council may deem appropriate."

As discussed within the Analysis/Rationale section of the report, staff considers the proposed development to be both in keeping with the character of the area and of sufficient density to ensure the subject lands are efficiently utilized.

"C.7.7.2 Varieties of RESIDENTIAL types will not be mixed indiscriminately, but will be arranged in a gradation so that higher density developments will complement those of a lower density, with sufficient spacing to maintain privacy, amenity and value."

It is considered that the high density development proposed is sufficiently separated from adjacent lower density residential development, while maintaining the intent to locate higher density development closer to transportation and transit corridors.

"C.7.7.3 Council will encourage a RESIDENTIAL ENVIRONMENT of an adequate physical condition that contains a variety of housing forms that will meet the needs of present and future residents. Accordingly, Council will:
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(iii) Support RESIDENTIAL development such as infilling, redevelopment, and the conversion of non-residential structures that makes more efficient use of the existing building stock and physical infrastructure that recognize and enhance the scale and character of the existing residential area by having regard to natural vegetation, lot frontages and areas, building height, coverage, mass, setbacks, privacy and overview; (O.P.A No. 128).

(v) Encourage new RESIDENTIAL development that provides a range of dwelling types at densities and scales that recognize and enhance the scale and character of the existing residential area by having regard to natural vegetation, lot frontages and areas, building height, coverage, mass, setbacks, privacy and overview;”

The proposal will increase the supply of housing in the neighbourhood in a manner that is compatible with existing surrounding residential uses. The proposal represents an appropriate example of infill development that will make efficient use of existing services, while ensuring that the existing character of the neighbourhood is maintained.

Based upon the forgoing, Planning staff is of the opinion that the conversion of the lands to residential would be appropriate and would conform to the Hamilton Official Plan.

Secondary Plan

The subject lands are located within the Ainslie Wood Westdale Secondary Plan and are currently designated “Industrial” on Schedule “N1” - Land Use Plan. It is proposed that the lands be re-designated to “High Density Residential” from “Industrial”. As such, the following policies of the Secondary Plan, among others, are applicable to the subject lands:

“6.4.6 (i) Lands presently used for industrial purposes, such as heavy manufacturing, will be encouraged to convert in the long term to less intensive uses...”

The conversion of the lands to residential is considered in-keeping with the transition away from Industrial uses within the Ainslie Wood Westdale Secondary Plan.

“6.4.1.4(i) High Density Residential areas permit multiple dwellings to a maximum height of 10 storeys, except in the case of existing buildings which may be higher. Additional height is permitted for new buildings, provided it will not produce any adverse wind impacts, or adverse shadow impacts on public spaces and/or private outdoor amenity spaces.”

The applications included sufficient wind and shadow studies to justify the height and massing of the building and, in addition, it would not be higher than 10 storeys. As such, staff is satisfied that the proposal conforms with the above policy.
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"6.4.1.4(ii) The residential densities associated with the High Density Residential uses will generally be about 50-125 units per gross hectare."

It is observed that the units per hectare for the proposal would exceed the generally anticipated residential density, however, the individual merits of the subject lands are considered to warrant an amendment to this policy.

"6.4.1.4 (iii) These High Density Residential areas are located along major roads, specifically sections of Main Street West..."

It is considered that the proximity of the subject lands to Main Street West ensures compatibility with this policy, and its intent to ensure all High Density Developments are readily accessible to major transportation networks.

"6.4.11 (vi) Views and vistas which are important to the Ainslie Wood Westdale area, including views of the Niagara Escarpment and Cootes Paradise, will be identified and preserved in development/redevelopment..."

As discussed previously, although the proposal at 10 storeys in height will interrupt certain vistas of the Escarpment, it is considered that the scale, bulk, and massing of the project, in addition to its location, satisfactorily mitigates against significant loss of views.

"6.4.12 (v) Extension of the Hamilton Brantford Rail Trail from Ewen Road east to Highway 403 and towards downtown will be considered a priority, and will be facilitated by coordinated City actions..."

Review of the location and implementation of the Rail Trail with respect to the current proposal will be conducted in more detail at the site plan stage. It is considered that this development represents an important opportunity to secure portions of this trail, providing a necessary and desirable network for existing and future residents.

RELEVANT CONSULTATION:

Agencies/Departments Having No Comments/Objections

- Budgets, Taxation and Policy Services, Corporate Services Department.
- Public Works Department (Traffic Engineering and Operations Section).
- Public Works Department (Forestry and Horticulture Section).
- Hamilton-Wentworth District School Board.
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Open Space Development and Park Planning

Open Space Development and Park Planning identify that the subject site is situated adjacent to the Hamilton-Brantford Rail Trail. The site plan does not indicate any direct pedestrian connections to Ewen Road or Riffe Range Road. Ewen Road is part of the City’s on-street cycling route. Both Ewen Road and Riffe Range Road have direct trail access that will be well utilized by students in this complex.

Hamilton Street Railway

- HSR operates various bus routes along Main Street with no planned changes in service.
- HSR supports the inclusion of high quality pedestrian amenities at this development like walkways, lighting, etc.
- Street orientation and pedestrian entrances are important.
- High density development located close to Main Street West is extremely transit supportive, in that it will generate additional passenger revenue without the need to extend routes or increase service frequency.

Public Consultation

In accordance with the new provisions of the Planning Act and the Council Approved Public Participation Policy, a Preliminary Circulation was sent to 52 property owners within 120 metres of the subject lands, and a public notice sign was placed on the property. A petition with approximately 300 names on it, and 15 formal letters, were received in response to the preliminary notice of circulation (attached as Appendix "E"). One letter was received in support of the proposal, and one letter was received from the Ainslie Wood/Westdale Community Association.

The letters and petition that stated concern with the proposal raised issues, including the potential for anti-social behaviour as a result of the saturation of students; unacceptable increase in traffic and inadequate parking; loss of greenspace; negative impact on surrounding uses - particularly residential and commercial; loss of amenity from privacy, loss of views, overshadowing and excessive wind tunnelling; aesthetically damaging and incongruent impact when compared with existing low profile neighbourhood; unsuitable access from a side street; not in accordance with existing secondary plan; would lower property values and water pressures; negatively affect the environment; and concerns over the existing soil stability to maintain the building. Finally concern was also raised over the potential of the building to be converted into condominiums in the future with sub-standard parking availability.
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As detailed above, a letter was also received from the Ainslie Wood/Westdale Community Association. The letter stated concern over the scale and massing of the project and the inadequate supply of parking. These issues have been discussed in detail in the Analysis/Rationale section of this report.

In accordance with the requirements of the Planning Act, notice of the Public Meeting will be sent to owners within 120m of the subject lands.

CITY STRATEGIC COMMITMENT:

By evaluating the “Triple Bottom Line”, (community, environment, economic implications) we can make choices that create value across all three bottom lines, moving us closer to our vision for a sustainable community, and Provincial interests.

Community Well-Being is enhanced. ☐ Yes ☐ No
The public are involved in the definition and development of local solutions. In response to concerns raised, the applicant has provided technical (wind and shadow) studies in support of the application.

Environmental Well-Being is enhanced. ☐ Yes ☐ No
Applying the principles of intensification and best use of available land, while ensuring impacts are mitigated and existing contaminated areas are remediated.

Economic Well-Being is enhanced. ☐ Yes ☐ No
Investment in Hamilton is enhanced and supported since the proposal provides for increased tax revenues.

Does the option you are recommending create value across all three bottom lines?
☐ Yes ☐ No

Do the options you are recommending make Hamilton a City of choice for high performance public servants?
☐ Yes ☐ No

:EJ
Attachments. (5)
Draft Amendment No. ____ to the City of Hamilton Official Plan

The following text, together with Schedule "A", "Land Use Concept"; Schedule "B", "Special Policy Areas"; and Schedule "N1", "Land Use Plan - Ainslie Wood Westdale Secondary Plan" of the Official Plan of the former City of Hamilton, attached hereto, constitute Official Plan Amendment No. _____.

Purpose:

The purpose of this Amendment is to re-designate the subject lands from "Industrial" to "Residential" on Schedule "A", Land Use Concept, delete the lands from Schedule "B", Special Policy Area - City of Hamilton Official Plan, and re-designate the subject lands from "Industrial" to "High Density Residential" on Schedule "N1", Land Use Plan - Ainslie Wood Secondary Plan, in order to permit a 10 storey residential building with a maximum density of 375 units per gross hectare.

Location:

The lands affected by this Amendment are known municipally as 17 Ewen Road, and have an area of approximately 0.42 Hectares.

Basis:

The intent of the Amendment is to permit a 10 storey residential building. The basis for the re-designation is as follows:

- The proposed development is consistent with the Provincial Policy Statement;
- The proposed development offers an opportunity for infill development within the built-up urban area conforms to the intent of the Places to Grow Plan, and proposes conversion of existing employment lands that have been supported through a City Initiated Municipal Comprehensive Review;
- The proposed development conforms with the Region of Hamilton-Wentworth Official Plan;
Appendix “B” to Report PED09103
(Page 2 of 6)

- The proposal is consistent with the “Residential” designation of the City of Hamilton Official Plan, and the “High Density Residential” designation of the Ainslie Wood Westdale Secondary Plan;

- The proposed development is suitably located in proximity to a major arterial road (Main Street West) with direct access to public transit, and is in close proximity to the McMaster University campus;

- The proposed development is compatible with the existing and planned development in the immediate area, and will not detract from the character of the surrounding neighbourhood; and,

- It is an appropriate development that will contribute to the range of residential options available to existing and future residents.

**Actual Changes:**

1. Schedule “A”, Land Use Concept, be revised by re-designating the subject lands from “Industrial” to “Residential”, as shown on the attached Schedule “A” to this Amendment.

2. Schedule “B”, Special Policy Areas, be revised by deleting the subject lands from the Plan Area, as shown on the attached Schedule “B” to this Amendment.

3. Schedule “N1” Land Use Plan - Ainslie Wood Westdale Secondary Plan, be revised by re-designating the subject lands from “Industrial” to “High Density Residential”, as shown on the attached Schedule “C” to this Amendment.

4. That the following Policy 6.4.1.4 (iii) be added as follows:

   6.4.1.4 (iii) Notwithstanding Policies 6.4.1.4 (i) and 6.4.1.4 (ii), for the lands known municipally as 17 Ewen Road with an area of approximately 0.42 hectares (1.06 acres) and designated High Density Residential on Schedule N1, Land Use Plan, the maximum height of any proposed building or structure shall be limited to 10 storeys, and the residential densities associated with the High Density Residential uses shall range from 300 to 375 units per gross hectare.
Implementation:

An implementing Zoning By-law Amendment and site plan will give effect to the intended use on the subject lands.

This is Schedule "1" to By-law No. [ ], passed on the [ ] day of [ ], 2009.

The
City of Hamilton

______________________________  ______________________________
Fred Eisenberger               Kevin C. Christenson
Mayor                           Clerk
Appendix “C” to Report PED09103 (Page 1 of 5)

Authority: Economic Development and Planning Committee
Report: 09- PED09103 (PED09103)
CM:

Bill No.

CITY OF HAMILTON
BY-LAW NO. ___________

To Amend Zoning By-law No. 6593 (Hamilton), respecting
lands located at 17 Ewen Road

WHEREAS the City of Hamilton Act, 1999, Statutes of Ontario, 1999 Chap. 14, Sch. C. did incorporate, as of January 1, 2001, the municipality “City of Hamilton”;

AND WHEREAS the City of Hamilton is the successor to certain area municipalities, including the former municipality known as the “The Corporation of the City of Hamilton and is the successor to the former Regional Municipality, namely, “The Regional Municipality of Hamilton-Wentworth”;

AND WHEREAS the City of Hamilton Act, 1999, provides that the Zoning By-laws and Official Plans of the former area municipalities and the Official Plan of the former regional municipality continue in force in the City of Hamilton until subsequently amended or repealed by the Council of the City of Hamilton;

AND WHEREAS the Council of the City of Hamilton passed Zoning By-law No. 6593 (Hamilton) on the 26th day of July 1950, which by-law was approved by the Ontario Municipal Board by Order dated the 7th day of December 1951, (File No. P.F.C. 3821);

AND WHEREAS the Council of the City of Hamilton, in adopting Item __________of Report 09- PED09103 of the Economic Development and Planning Committee at its meeting held on the __________ day of __________, 2009, recommended that Zoning By-law No. 6593 (Hamilton), be amended as hereinafter provided;

AND WHEREAS this By-law will be in conformity with the Official Plan of the Hamilton Planning Area, approved by the Minister under the Planning Act on June 1, 1982, upon approval of Official Plan Amendment No. __________, proposed by the City of Hamilton, but not yet approved in accordance with the provisions of the Planning Act.

NOW THEREFORE the Council of the City of Hamilton enacts as follows:
1. That Sheet No. W46 of the District Maps, appended to and forming part of By-law No. 6593 (Hamilton), is amended by changing the zoning from the “J/S-1552” (Light and Limited Heavy Industry, Etc.) District, Modified, to the “E-3’-H” (High Density Multiple Residential - Holding) District, Modified, on the lands the extent and boundaries of which are shown on the plans hereto annexed as Schedule “A”.

2. That the “E-3’-H” (High Density Multiple Residential - Holding) District regulations, as contained in Section 11C of Zoning By-law No. 6593, be modified to include the following special requirements:

(a) That notwithstanding Section 11C (1a) of Zoning By-law No. 6593, the height of a building or structure shall not exceed 10-storeys and 35 metres.

(b) That notwithstanding Section 11C(4) of Zoning By-law No. 6593, no buildings or structures shall have a total Gross Floor Area of more than 19,000m².

(c) That notwithstanding Section 11C(2) of Zoning By-law No. 6593, the following yards shall be required:

1) A westerly yard (Ewen Road) having a depth of not less than 2.1 metres adjacent to a building height of 21 metres (7 storeys); 5.9 metres adjacent to a building height of 24 metres (8 storeys); and 11.39 metres adjacent to a building height of 35 metres (10 storeys), shall be provided and maintained for all buildings and structures.

2) A northerly yard having a depth of not less than 12 metres shall be provided and maintained for all buildings and structures.

3) A southerly yard having a depth of not less than 3.0 metres shall be provided and maintained for all buildings and structures.

4) An easterly yard (Riffe Range Road) having a depth of not less than 2.1 metres adjacent to a building height of 21 metres (7 storeys); 5.7 metres adjacent to a building height of 24 metres (8 storeys); and 13.7 metres adjacent to a building height of 35 metres (10 storeys), shall be provided and maintained for all buildings and structures.

(d) That notwithstanding Section 11C(5) of Zoning By-law No. 6593, there shall be provided and maintained at least 15% of the area of the lot as landscaped area.
Appendix “C” to Report PED09103 (Page 3 of 5)

(e) That notwithstanding Section 18A.(1)(c) of Zoning By-law No. 6593, no loading spaces shall be required.

(f) That notwithstanding Section 18A.(14g) of Zoning By-law No. 6593, required parking shall be permitted in a required front yard.

(g) That no vehicular access or egress shall be provided to Ewen Road.

3. That the ‘H’ symbol applicable to lands referred to in Section 1 of this By-law shall be removed conditional upon:

a) The submission of a signed Record of Site Condition (RSC) to the City of Hamilton and the Ministry of the Environment (MOE). The RSC must be to the satisfaction of the City of Hamilton, Director of Planning, including an acknowledgement of receipt of the RSC by the MOE.

b) That the Owner shall investigate the noise levels on the site and determine the noise control measures that are satisfactory to the City of Hamilton in meeting the Ministry of the Environment’s recommended sound level limits. An acoustical report, prepared by a qualified professional Engineer containing the recommended control measures, shall be submitted, to the satisfaction of the City of Hamilton, Director of Planning.

The ‘H’ symbol shall be removed by amendment to this By-law, and the development of the lands referred to in Section 1 of this By-law may, at such time, proceed in accordance with the “E-3” District, Modified provisions, subject to the special requirements referred to in Section 2 of this By-law.

4. That no building or structure shall be erected, altered, extended or enlarged; nor shall any building or structure or part thereof be used; nor shall any land be used, except in accordance with the “E-3” (High Density Multiple Residential) District provisions, subject to the special requirements referred to in Sections 2 and 3.

5. That By-law No. 6593 (Hamiton) is amended by adding this by-law to Section 18B as Schedule S-1609.

6. That Sheet No. W46 of the District Maps is amended by marking the lands referred in Section 1 of this By-law as S-1609.
7. That the Clerk is hereby authorized and directed to proceed with the giving of notice of the passing of this By-law, in accordance with the Planning Act.

PASSED and ENACTED this [date] day of [date], 2009.

__________________________    _______________________________
Fred Eisenberger                   Kevin C. Christenson
Mayor                              Clerk

ZAC-07-062
Schedule "A"

Map Forming Part of By-Law No. 09-____
to Amend By-law No. 6593

17 Ewen Rd, Hamilton

Change in Zoning from the "J" (Light and Limited Heavy Industrial, etc) District, Modified, to the "E-3-\*H" (High Density Multiple Residential - Holding) District, Modified.

Clerk
Mayor

This is Schedule "A" to By-Law No. 09-
Passed the __________ day of ________________, 2009

Planning and Economic Development Department
Committee Direction:

Following a Public Meeting held to discuss the merits of a proposed Official Plan Amendment and change in zoning to permit the development of the lands for a 10-storey multiple residential building intended to be used for the purposes of student accommodation, the Economic Development and Planning Committee, on April 21, 2009, deferred consideration of the report pending the completion of a noise study, and recommended that the applicants, Auburn Developments and Cadbury, meet and discuss the proposal.

The original recommendation to Committee, contained within staff Report PED09103 (Appendix "D"), recommended approval of the application subject to the property being placed under an 'H' Holding provision in order that all noise issues, consisting of both noise impact from the Cadbury Plant and other stationary noise, as well as noise resulting from the site's proximity to Main Street West, be addressed. During the Public Meeting, the Economic Development and Planning Committee heard delegations from the adjacent landowners, including the Plant Manager of Cadbury, who noted the potential for noise emitted from the Cadbury Plant to be "reflected" by the proposed multiple dwelling back into the residential portion of the neighbourhood. Committee, consequently, deferred decision on the application pending completion of a revised noise study for the subject property.
SUBJECT: Applications for a Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103(a)) (Ward 1) - Page 2 of 4

Information:

The subject lands comprise approximately 0.42 hectares (1.06 acres) of land within the Urban Area. The site is located in the block contained by Main Street West to the north, Rifle Range Road to the east, Ewen Road to the west, and Whitney Avenue to the south, with frontage directly along Ewen Road and Rifle Range Road, as shown on Appendix "A" to this report. Notable surrounding uses include the former CNIB building (recently converted to a 9-storey building for the purpose of student accommodation) and the Cadbury Candy Factory located immediately south of the subject property.

The site currently maintains an industrial designation in the Hamilton Official Plan, the Ainslie Wood Secondary Plan, and the Hamilton Zoning By-law. The site was formally used as a warehouse facility, and remains occupied by two buildings which are proposed to be demolished in order to permit the proposed residential development.

The application would result in the conversion of the lands from their "Industrial" designation. This has been assessed through the City initiated Municipal Comprehensive Review, adopted by Council on June 25, 2008 (Report 08-022) and, as such, staff is satisfied that the conversion from this designation is appropriate. The proposal would consist of a 10-storey purpose built student apartment building, providing approximately 150 units. The subject lands have frontage on both Rifle Range Road and Ewen Road, with access to the building provided from Rifle Range Road. A total of 195 parking spaces will be provided in two levels of underground parking (166 spaces) and surface parking (29 spaces). No access to the site is proposed from Ewen Road.

As mentioned previously, staff supported the proposed applications on the basis of a Holding provision that would ensure a comprehensive noise study be completed. At the Economic Development and Planning Committee, and based on the information presented by the adjacent landowners, Committee members, however, considered it prudent to have this information prior to granting any approvals. Consequently, the item was deferred in order for this study to be conducted, with particular emphasis on the 'reflection' of noise emitted by the Cadbury Plant.

The applicant has undertaken additional analysis examining the impact of noise 'reflection'. Staff is of the understanding that this analysis has been provided to the Manager of the Cadbury Plant by the applicant. The applicant's agent, Chris Pidgeon, has confirmed to staff that, to date, they have not had any responses or communications with the Cadbury Plant regarding the information provided.

Staff contacted the Cadbury Plant Manager directly, who has confirmed through an e-mail received on April 23, 2010, that Cadbury is currently completing a comprehensive analysis regarding the compatibility of residential encroachment near their plant, and that noise is but one aspect. They further confirmed that this analysis is on-going, and once completed, they would be in a better position to advise as to the compatibility of the

Vision: To be the best place in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities.
Values: Honest, Accountability, Innovation, Leadership, Respect, Excellence, Teamwork
SUBJECT: Applications for a Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6593 for Lands Known as 17 Ewen Road (Hamilton) (PED09103(a)) (Ward 1) - Page 3 of 4

proposed residential use. They anticipate completing this analysis later this year. Staff has undertaken their own review of the noise information provided by the applicant in light of Committee’s deferral of the applications and provides the following comments:

(1) The November 21, 2007, memo (Appendix “B”) indicates that Cadbury requires mitigation measures to be in compliance at existing receptors, and additional mitigation will be required at the Cadbury facility as a result of the Auburn residences. The memo also indicates that the additional mitigation costs are the responsibility of Auburn development, and a co-operative effort between Cadbury and Auburn is suggested. Staff has not received any information indicating that Auburn and Cadbury have come to any agreements pertaining to mitigation measures;

(2) The November 21, 2007, memo (Appendix “B”) does not provide any information on what the actual sound levels would be in the plane of a window (POW) at the proposed development as a result of the Cadbury site. This is required in order to determine if the MOE sound level limits at the POW can be met or, if not, what the excess in sound level is (i.e. is the excess minor);

(3) The June 22, 2009, RWDI letter (Appendix “C”) states that although mitigation at the source of the noise is preferred under the MOE guidelines, receptor-based mitigation (i.e. at the proposed Auburn development) is permitted under certain circumstances. While receptor-based mitigation may be an option under certain scenarios, the MOE guidelines are clear that this is only when dealing with minor noise excesses. As such, and in accordance with Comment 2, the sound level limits at the POW must first be established in order to determine whether central air conditioning is an acceptable mitigation measure, and that the warning clause for stationary sources is not being used to justify an excess over the criteria. Based on the extent of the excess, building design may be a required noise mitigation measure; and,

(4) There is nothing within the information provided that addresses the noise impact of Main Street West and other stationary noise sources in close proximity to the proposed development (i.e. drive-through restaurant, auto repair shop).

Based on the foregoing, staff is of the opinion that further revisions/analysis is required. A comprehensive noise study should be provided, which addresses the above noted comments, and provides a clear set of recommendations on the required noise mitigation measures which would need to be implemented prior to the proposed development proceeding.
APPENDIX “C” TO REPORT PED09103(b) (PAGE 4 OF 12)

SUBJECT: Applications for a Approval of an Official Plan Amendment and an Amendment to Hamilton Zoning By-law No. 6693 for Lands Known as 17 Ewen Road (Hamilton) (PED09103(a)) (Ward 1) - Page 4 of 4

Conclusion

In the absence of a complete and comprehensive noise study, staff continue to support the application but maintain the recommendation for a Holding provision in order to ensure the said study is conducted and completed, to the satisfaction of the City of Hamilton.

- Appendix “A”: Location Plan
- Appendix “B”: November 21, 2007, Memo
- Appendix “C”: June 22, 2009, RWDI Letter
- Appendix “D”: Staff Report

EJ
Attachs. (4)
June 22, 2009

GSP Group Inc.
201-72 Victoria Street South
Kitchener, Ontario N2G 4Y9

Attn: Ms. Kristen Barisade, MCIP, RPP
Email: kbarisade@gspgroup.ca

Re: Auburn Developments - 17 Ewen Road, Hamilton Project
Applicability of Receptor-Based Mitigation Measures
RWDI Project W07-5053A

RWDI AIR Inc. (RWDI) was retained by GSP Group Inc., on behalf of Auburn Developments to conduct an environmental noise assessment for their proposed 17 Ewen Road development, located in Hamilton, Ontario. The focus of the study was on noise impacts from Cadbury Adams (Cadbury) plant, located adjacent and to the south of the site.

Detailed noise modelling of Cadbury was conducted, and our results were summarized in a memo dated November 21, 2007.

Under Ministry of the Environment (MOE) Publication LU-131, mitigation at the source of the noise (i.e., Cadbury, in this case) is preferred. Tables outlining the noise sources at Cadbury requiring mitigation for various scenarios were provided in the November 2007 memorandum.

Receptor-based mitigation (i.e., at the proposed development, instead of at Cadbury) is allowed under Publication LU-131 in certain circumstances. The mitigation would involve the use of central air conditioning and sealed (inoperable) windows. These may be considered as a possible mitigation measure option:

- For high rise multiple unit residential use, and
- When the area is designated by the municipality as undergoing a transition from industrial to residential land use;

For our consideration, this appears to be the case for the 17 Ewen Road site, thus, under LU-131, mitigation at the development may be allowed.

The required receptor-based mitigation would be:

a) Mandatory central air conditioning of the development,

Reputation Resources Results
905-827-1311 Fax: 905-827-1310 E-mail: info@rrresult.com Web: www.rrresult.com
June 22, 2000
Mr. Khale Benabidi, MCP, RPP
Auburn Development - Pond Road Project
Page 2

b) Sealed (inoperable) windows,

c) No balconies or outdoor amenity areas on the exposed side of the building, directly facing Cadbury,

d) The following noise warning clauses registered on Title:

"Purchasers are advised that due to the proximity of adjacent industries, including Cadbury, sound levels from these industries may at times be audible."

"Purchasers are advised that despite the inclusion of noise control measures within the development area and within individual building units, noise levels may become of concern, occasionally interfering with some activities of the occupants."

Should you have any questions or concerns, please feel free to contact us.

Yours very truly,

RWDI AIR Inc.

[Signature]

Project Director / Associate
INTRODUCTION
This memo has been prepared in regards to noise issues that are expected to occur at a future residential building proposed by Auburn Developments (Auburn), located at 17 Ewen Road in Hamilton, Ontario. The main source of industrial noise that will impact the residence is the Cadbury Adams (Cadbury) candy and confections manufacturing facility located to the south of the site. A detailed noise assessment of the Cadbury facility has been completed, and recommendations for both the Cadbury facility and Auburn are presented.

BACKGROUND
Auburn Developments has proposed to construct a residential building at 17 Ewen Road in Hamilton, Ontario. The site is currently zoned for residential use and currently is occupied by a public storage facility. As part of rezoning, the City of Hamilton has requested that a noise study be completed. The criteria for this study are set out in the Ministry of the Environment (MOE) guideline LU-131 for land use planning. The applicable guidelines for evaluating noise impacts from "industrial" sources in a land-use planning context are the MOE's Publication LU-131 guideline Limits. These guidelines state that one-hour average sound exposures from facility operations should not exceed that of the background, where the background is defined as the ambient sound levels present in the environment without the facility operating, or set minimum levels depending on the nature of the area. While the guidelines are still being directly enforced by the MOE, municipalities tend to use LU-131 to provide guidance in land-use planning decisions and these guidelines are accepted by the Ontario Municipal Board for decisions with regard to land use disputes.

The building proposed for the site is anticipated to be subject to environmental noise impacts from the surrounding transportation and industrial noise sources. Industrial noise results from the Cadbury facility located to the south of the site, at 45 Ewen Road, and from a Union Gas metering station across Ewen Road to the west. Road noise results primarily from Main Street, to the north. When the impacts from transportation or from industrial noises exceed the limits set out in LU-131, they should be mitigated to ensure an adequate noise environment for the residents of the proposed building. Noise impacts from transportation sources have been assessed and reported separately from this memo. This memo deals with noise from the adjacent Cadbury and Union Gas facilities only.
The background sound levels used to establish the applicable guideline limits for industrial noise were obtained through measurement. Long-term sound level measurements were conducted in October 2006 at the 17 Food Road site. Results indicated that MOE guideline minimum sound level limits of 50 dBA and 45 dBA apply for day-time and night-time periods, respectively. These limits are the maximum cumulative sound level that the Cadbury facility can create at noise sensitive receptors in the area and still comply with MOE guidelines.

ANALYSIS OF CADBURY FACILITY

Initial analysis of industrial noise impacts from Cadbury indicated that detailed analysis was necessary. The detailed analysis was based on source-specific noise emission data and modeling. Measurements of the individual noise sources at Cadbury were conducted by RWDL personnel in March 2007. Using sound measurement data, published manufacturer’s sound data, and engineering calculations, a model representative of Cadbury’s noise emissions was created.

The model confirmed the initial analysis that Cadbury’s noise impacts are above the LU-131 limits at the proposed Auburn development. Since Auburn is proposing to rezone the land at 17 Food to residential, under LU-131 guidelines, it is Auburn’s responsibility to ensure that sound levels meet the MOE guideline limits on their property. To meet this requirement, it is necessary that noise mitigation measures be installed at the sources of the noise.

Our assessment also leads us to believe that Cadbury may have reason to work cooperatively with Auburn in reducing their noise emissions. Cadbury is required to have a Certificate of Approval (CoA) from the MOE for operations at their site. However, it is not clear if Cadbury has a CoA. If Cadbury were to apply for a new Certificate of Approval, the MOE would expect Cadbury to ensure that sound levels meet the MOE Publication NPC-205 noise guideline limits at the existing noise sensitive receptors. Based on the information available, Cadbury’s noise emissions at the current existing baselines do not appear to meet these limits.

RECOMMENDATIONS

Noise mitigation measures needed to achieve the sound level limits have been developed. Suggested mitigation measures for Cadbury to be in compliance at their existing receptors are shown in Table 1. Table 2 provides the additional mitigation needed to achieve compliance at 17 Food Road after Cadbury is in compliance at its existing receptors. A third scenario presented in Table 3 has been developed where both parties work cooperatively and take advantage of the other’s mitigation needs. Cost sharing would enable both parties to achieve the desired end goal for a reduced total cost. The benefit to cooperation is accentuated because it is significantly more costly to retrofit existing mitigation measures to make small increases in the amounts of mitigation needed. It is in the interest of both parties to work co-operatively towards an optimized combined solution.
CONCLUSIONS

An assessment of noise from the adjacent Cadbury facility has been completed. Since noise impacts from the Cadbury facility are predicted to be above the LU-131 limits, detailed analysis was used to develop three suggested mitigation scenarios. If Cadbury applies for a CoA, then Cadbury is responsible for bringing their facility into compliance with respect to existing noise receptors. These mitigation measures are presented in Table 1. However, with the development of the Auburn residence, additional mitigation will be required on the Cadbury facility as described in Table 2. The additional cost of further mitigation on Cadbury noise sources is Auburn's responsibility. It is therefore suggested that Cadbury and Auburn work together to achieve compliance with their respective MCR guideline limits.

If you have any questions or concerns, please do not hesitate to contact our office.

Sincerely,

RWDI Air Inc.

Nigel Taylor
Project Manager
# Appendix "C" to Report PED09103(b) (Page 10 of 12)

Appendix "C" to Report PED09103(a) (Page 4 of 6)

## Table 1: Mitigation Needed for Facility to Comply at Existing Noise Receptors

<table>
<thead>
<tr>
<th>Facility Source Name</th>
<th>Required Mitigation</th>
<th>Suggested Mitigation Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan (including 2nd)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan (including 3rd)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan (including 4th)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan (including 5th)</td>
<td></td>
<td></td>
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<tr>
<td>Fan (including 6th)</td>
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<td></td>
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<tr>
<td>Fan (including 7th)</td>
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<td></td>
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<tr>
<td>Fan (including 8th)</td>
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<td></td>
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<tr>
<td>Fan (including 9th)</td>
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<td></td>
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<tr>
<td>Fan (including 10th)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan (including 11th)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan (including 12th)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigeration units on trucks</td>
<td>33</td>
<td>Fat pancakes of cooler or on facility cooling equipment</td>
</tr>
<tr>
<td>Bulk storage</td>
<td>8</td>
<td>Silencer or traps, or condenser traps, or condenser trap pipes</td>
</tr>
<tr>
<td>Bulk storage</td>
<td>8</td>
<td>Silencer or traps, or condenser traps, or condenser trap pipes</td>
</tr>
<tr>
<td>Fan (including 2nd)</td>
<td>10</td>
<td>Low noise fans, barriers</td>
</tr>
<tr>
<td>Fan (including 3rd)</td>
<td>10</td>
<td>Low noise fans, barriers</td>
</tr>
<tr>
<td>Fan (including 4th)</td>
<td>10</td>
<td>Low noise fans, barriers</td>
</tr>
<tr>
<td>Fan (including 5th)</td>
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<td>Fan (including 9th)</td>
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<td>Low noise fans, barriers</td>
</tr>
<tr>
<td>Fan (including 11th)</td>
<td>10</td>
<td>Low noise fans, barriers</td>
</tr>
<tr>
<td>Fan (including 12th)</td>
<td>10</td>
<td>Low noise fans, barriers</td>
</tr>
</tbody>
</table>

Note: All mitigation values are a reduction of the overall noise source sound power level in decibels (dB). 

a/a – not applicable
### Table 2: Mitigation Needed for Compliance at the Auburn Development, after Mitigation of Existing Noise Receptors

<table>
<thead>
<tr>
<th>Emission Source Name</th>
<th>Required Additional Mitigation</th>
<th>Suggested Mitigation Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan motors, House 3</td>
<td>5 New</td>
<td>Low noise fans, barriers</td>
</tr>
<tr>
<td>Fan motors, Rear Pile B</td>
<td>7 Upgrade from 5</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Boiler stack 1</td>
<td>12 New</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Boiler stack 2</td>
<td>12 Upgrade from 10</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Cooling tower 1</td>
<td>12 Upgrade from 10</td>
<td>Stack silencer, acoustic liner, Low noise fans</td>
</tr>
<tr>
<td>Cooling tower 2</td>
<td>15 Upgrade from 10</td>
<td>Stack silencer, acoustic liner, Low noise fans</td>
</tr>
<tr>
<td>Exhaust stack 1</td>
<td>16 New</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Exhaust stack 2</td>
<td>16 New</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Exhaust stack 3</td>
<td>16 New</td>
<td>Stack silencer</td>
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<td>16 New</td>
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<tr>
<td>Exhaust stack 7</td>
<td>16 New</td>
<td>Stack silencer</td>
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<tr>
<td>Exhaust stack 8</td>
<td>16 New</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Exhaust fans 90</td>
<td>16 Upgrade from 12</td>
<td>Stack silencer, acoustic liner, Low noise fans</td>
</tr>
<tr>
<td>Exhaust fans 190 CARNES</td>
<td>16 New</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Exhaust stack 12</td>
<td>16 New</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Gas retirees</td>
<td>16 New</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Motor-generators units on trucks</td>
<td>16 New</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Soundwall fan 61</td>
<td>30 Upgrade from 4</td>
<td>Silencer or enclosures for trucks, or extending walls on the property</td>
</tr>
<tr>
<td>Bulk silencing</td>
<td>20 Upgrade from 8</td>
<td>Silencer or enclosures for trucks, or extending walls on the property</td>
</tr>
<tr>
<td>Bulk silencing</td>
<td>20 Upgrade from 8</td>
<td>Silencer or enclosures for trucks, or extending walls on the property</td>
</tr>
<tr>
<td>Fan exhaust 500</td>
<td></td>
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<tr>
<td>Fan exhaust 1000</td>
<td></td>
<td></td>
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<td>Fan exhaust 1500</td>
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</tr>
<tr>
<td>Fan exhaust 2000</td>
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<td></td>
</tr>
</tbody>
</table>

**Notes:** All mitigation values are a reflection of the overall noise source sound power level in decibels (dB).

*NA* - not applicable.
Table 3: Mitigation Needs for Existing Noise Receptors and Potential Development Based on Community Effort

<table>
<thead>
<tr>
<th>Ordinary Source Name</th>
<th>Required Mitigation</th>
<th>Suggested Mitigation Methods</th>
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</thead>
<tbody>
<tr>
<td>Fan intake system</td>
<td>5</td>
<td>Location data, barriers</td>
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<td>Fan intake Standard 38</td>
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<tr>
<td>Fan intake Condition</td>
<td>12</td>
<td>Location data, barriers</td>
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<tr>
<td>Boiler stack 1</td>
<td>12</td>
<td>Silencer, barriers</td>
</tr>
<tr>
<td>Boiler stack 2</td>
<td>12</td>
<td>Silencer, barriers</td>
</tr>
<tr>
<td>Cooling tower 1</td>
<td>15</td>
<td>Lowering temp. limits, barriers</td>
</tr>
<tr>
<td>Cooling tower 2</td>
<td>15</td>
<td>Lowering temp. limits, barriers</td>
</tr>
<tr>
<td>Exhaust stack 1</td>
<td>10</td>
<td>No change, barriers</td>
</tr>
<tr>
<td>Exhaust stack 2</td>
<td>15</td>
<td>No change, barriers</td>
</tr>
<tr>
<td>Stack chimney</td>
<td>12</td>
<td>No change, barriers</td>
</tr>
<tr>
<td>Stack chimney</td>
<td>12</td>
<td>No change, barriers</td>
</tr>
<tr>
<td>Straight stack 1</td>
<td>10</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stack 2</td>
<td>12</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stack 3</td>
<td>12</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stack 4</td>
<td>10</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stack 4</td>
<td>10</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stack 5</td>
<td>10</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stack 6</td>
<td>10</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stack 7</td>
<td>10</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stack 8</td>
<td>10</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stack 9</td>
<td>10</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stack 10</td>
<td>10</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stacks 11</td>
<td>10</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>Straight stacks 12</td>
<td>10</td>
<td>Stack chimney</td>
</tr>
<tr>
<td>One value</td>
<td>33</td>
<td>Full extent of noise is not defined</td>
</tr>
<tr>
<td>Refrigeration units on stacks</td>
<td>33</td>
<td>Full extent of noise is not defined</td>
</tr>
<tr>
<td>Conference Halls</td>
<td>17</td>
<td>Silencer, acoustic device</td>
</tr>
<tr>
<td>Grill equipment</td>
<td>20</td>
<td>Silencer, acoustic device</td>
</tr>
<tr>
<td>Grill ventilation</td>
<td>20</td>
<td>Silencer, acoustic device</td>
</tr>
<tr>
<td>Fan intake K/P</td>
<td>10</td>
<td>Silencer, acoustic device</td>
</tr>
<tr>
<td>Fan intake Tone 1</td>
<td>10</td>
<td>Silencer, acoustic device</td>
</tr>
<tr>
<td>Fan intake Tone 2</td>
<td>10</td>
<td>Silencer, acoustic device</td>
</tr>
<tr>
<td>Fan intake Tone 3</td>
<td>10</td>
<td>Silencer, acoustic device</td>
</tr>
<tr>
<td>Fan intake Tone 4</td>
<td>10</td>
<td>Silencer, acoustic device</td>
</tr>
</tbody>
</table>

Note: All mitigation values are a reflection of the overall noise source sound power level to indicate (dB). n/a = not applicable.
Environmental Noise Assessment
Stationary Noise Impacts
Proposed 10 Storey Student Residence
17 Ewen Road, Hamilton, Ontario

Novus Reference No. 10-0100       Version No. 1       January 24, 2010

Contacts: Scott Penton, P.Eng.
Nigel Taylor, M.Sc., EP

novusenv.com
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Harmonizing the Built and Natural Environments

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1.0 INTRODUCTION

Novus Environmental Inc. (Novus) was retained by the GSP Group on behalf of Auburn Developments Inc. to conduct an Environmental Noise Assessment of potential industrial, "stationary" noise sources near the proposed 10-storey student residence located at 17 Ewen Road, Hamilton, Ontario.

1.1 Focus of Report

The focus of this report is to assess the potential for noise impacts from near-by industrial operations, particularly the Cadbury Adams Inc. facility located at 45 Ewen Road, to impact on the proposed 17 Ewen Road development.

In this assessment, the following noise guidelines are considered:

- Ministry of the Environment (MOE) Guideline D-6, Compatibility Between Industrial Facilities And Sensitive Land Uses
- MOE Publication LU-131, Noise Assessment Criteria in Land Use Planning, and its associated Annex and Requirements documents
- MOE Publication NPC-205, Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban)
- The City of Hamilton Bylaw 03-020, To Regulate Noise (the Noise Bylaw)

1.2 Information Considered In This Assessment

The following information was considered in this assessment:

- The current proposed site plan for the 17 Ewen Road development, provided by GSP, as revised November 7, 2008.
- Site visits to the area conducted by Novus personnel on October 27, 2010, and on November 5, 2010.
- The June 14, 2010 letter from Mr. Phil Girard, P.Eng, of Pinchin Environmental Ltd., (the "Pinchin Report"), to Mr. Paul Chang of Cadbury North America, entitled “Amendment to Hamilton Zoning Bylaw No. 6593; Proposed Construction of 10 Storey Apartment Building at 17 Ewen Road”.
- Information on the current Official Plan, Secondary Plan and zoning restrictions for the site and for the area, provided by GSP.
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- Noise modelling results for the Cadbury 45 Ewen Road Facility, for noise modelling assessment work conducted by RWDI AIR Inc.\(^1\), contained in the following documents:
  - Memorandum dated November 21, 2007 to Mr. Jamie Crich, Auburn Developments, From Mr. Nigel Taylor, RWDI AIR, regarding “Suggested Mitigation of Cadbury Noise Sources for Auburn 17 Ewen Road Development”
  - Letter of Opinion dated May 20, 2009, to Ms. Kristen Barisdale, GSP Group, from Mr. Scott Penton, RWDI AIR, regarding noise impacts from the Cadbury facility and the effect of the 17 Ewen Road facility on those impacts.
  - Letter of Opinion dated June 22, 2009, to Ms. Kristen Barisdale, GSP Group, from Mr. Scott Penton, RWDI AIR, regarding the applicability of receptor-based noise mitigation measures.
- Certificates of Approval (Air & Noise) (“C of A’s”) for industrial facilities in the area, obtained from the Environmental Bill of Rights (EBR) Registry Services and From the MOE’s C of web search utility.\(^2\)

Copies of the current proposed site plan, and the RWDI memorandum and letter are included in Appendix A.

1.3 Nature of the Subject Lands

The subject property, 17 Ewen Road, is currently a 1-storey commercial storage facility. The proposal is to construct a new 10-storey (9 residential and 1 mechanical) privately-run student residence on the property, to service McMaster University students. The location is shown in Figure 1, and a copy of the site plan can be found in Appendix A.

There are no communal outdoor amenity spaces associated with the development.

1.4 Nature of the Surroundings

The site is located between Ewen Road and Rifle Range Road, approximately 75 m south of Main Street. See Figure 1. The lots to the north contain commercial uses and restaurants.

To the west, on the far side of Ewen Road, there are a commercial and institutional uses including a physiotherapy clinic and funeral home, and warehouse space. Further west behind these uses is the open space of the hydro corridor.

To the east of the subject property along Rifle Range Road are a paint store and a Fortino’s grocery store.

Directly to the south of the 17 Ewen Road property is the Cadbury Adams Canada Ltd. facility at 45 Ewen Road.

\(^1\) Mr. Scott Penton and Mr. Nigel Taylor of Novus Environmental Inc. were employees of RWDI AIR Inc. during this period and were involved and responsible for the referenced modelling and reporting.

2.0 GUIDELINES D-1 and D-6

The D-series of guidelines were developed by the Ontario Ministry of the Environment (MOE) in 1995 as guidance for recommended separation distances and other control measures for land use planning proposals to prevent or minimize ‘adverse effects’ from the encroachment of incompatible land uses where a facility either exists or is proposed. The guideline specifically addresses issues of odour, dust, noise and litter.

Adverse effect is a term defined in the Environmental Protection Act and “means one or more of,

- impairment of the quality of the natural environment for any use that can be made of it,
- injury or damage to property or to plant or animal life,
- harm or material discomfort to any person,
- an adverse effect on the health of any person,
- impairment of the safety of any person,
- rendering any property or plant or animal life unfit for human use,
- loss of enjoyment of normal use of property, and
- interference with the normal conduct of business”

To minimize the potential to cause an adverse effect, areas of influence and recommended minimum setback distances were included within the guidelines. Guideline D-6 “Compatibility Between Industrial Facilities And Sensitive Land Uses” is specific to industrial uses in proximity to more sensitive land uses such as the proposed church.

The areas of influence and recommended separation distances from the guidelines are as follows:

**Table 1:** Guideline D-6 – Potential Influence Areas and Recommended Minimum Setback Distances for Industrial Land Uses

<table>
<thead>
<tr>
<th>Industry Classification</th>
<th>Area of Influence</th>
<th>Recommended Minimum Setback Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I – Light Industrial</td>
<td>70 m</td>
<td>20 m</td>
</tr>
<tr>
<td>Class II – Medium Industrial</td>
<td>300 m</td>
<td>70 m</td>
</tr>
<tr>
<td>Class III – Heavy Industrial</td>
<td>1000 m</td>
<td>300 m</td>
</tr>
</tbody>
</table>

Industrial categorization criteria are supplied in Guideline D-6-2, and are shown in the following table:
Harmonizing the Built and Natural Environments

Table 2: Guideline D-6 – Industrial Categorization Criteria

<table>
<thead>
<tr>
<th>Category</th>
<th>Outputs</th>
<th>Scale</th>
<th>Process</th>
<th>Operations / Intensity</th>
<th>Possible Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>Noise: Sound not audible off-property Dust: Infrequent and not intense Odour: Infrequent and not intense Vibration: No ground-borne vibration on plant property</td>
<td>• No outside storage • Small-scale plant or scale is irrelevant in relation to all other criteria for this Class</td>
<td>• Self-contained plant or building which produces/stores a packaged product • Low probability of fugitive emissions</td>
<td>• Daytime operations only • Infrequent movement of products and/or heavy trucks</td>
<td>• Electronics manufacturing and repair • Furniture repair and refinishing • Beverage bottling • Auto parts supply • Packaging and crafting services • Distribution of dairy products • Landry and linen supply</td>
</tr>
<tr>
<td>Class 2</td>
<td>Noise: Sound occasionally heard off-property Dust: Frequent and occasionally intense Odour: Frequent and occasionally intense Vibration: Possible ground-borne vibration, but cannot be perceived off-property</td>
<td>• Outside storage permitted • Medium level of production allowed</td>
<td>• Open process • Periodic outputs of minor annoyance • Low probability of fugitive emissions</td>
<td>• Shift operations permitted • Frequent movements of products and/or heavy trucks with the majority of movements during daytime hours</td>
<td>• Magazine printing • Paint spray booths • Metal command • Electrical production • Manufacturing of dairy products • Dry cleaning services • Feed packing plants</td>
</tr>
<tr>
<td>Class 3</td>
<td>Noise: Sound frequently audible off property Dust: Persistent and/ or intense Odour: Persistent and/or intense Vibration: Ground-borne vibration can frequently be perceived off-property</td>
<td>• Outside storage of raw and finished products • Large production levels</td>
<td>• Open process • Frequent outputs of major annoyances • High probability of fugitive emissions</td>
<td>• Continuous movement of products and employees • Daily shift operations permitted</td>
<td>• Paint and varnish manufacturing • Organic chemical manufacturing • Breweries • Solvent recovery plants • Soaps and detergent manufacturing • Metal refining and manufacturing</td>
</tr>
</tbody>
</table>
2.1 Local Surrounding Industries and Commercial Uses

Under the provisions of the Environmental Protection Act, all facilities which may emit a contaminant to the environment, including sound and vibration, must obtain a Certificate of Approval (Air & Noise) (a "C of A") to operate. A review of Cs of A for facilities within 300 m of the proposed 17 Ewen road development was conducted.

The site is located between Ewen Road and Rifle Range Road, approximately 75 m south of Main Street. See Figure 1. The lots to the north contain commercial uses, including:

- Westdale Car Service
- Carstar Autoparts store
- Money Mart
- Pizza Hut
- Skyline Billiards Lounge
- Burger King

Commercial
Commercial
Commercial
Restaurant
Commercial
Restaurant

None of these uses have significant noise sources associated with them. None have, or would require Certificates of Approval (Air & Noise) from the MOE, based on their types and on the exemptions provided under O.Reg 524/98.

To the west, on the far side of Ewen Road, there are the following uses:

- West End Physiotherapy Clinic
- Union Gas valve station
- United Hebrew Memorial Chapel
- Clarke Productions Ltd. (5 Ofield Road)
- Advance Dental Ceramics
- FWP Wholesaling

Clinic
Pipeline valve / Gate station
Funeral Home & Chapel
Screen Printing Warehouse
Dental laboratory
Commercial / Warehousing

Again, the majority of these uses would not require Certificates of Approval (Air & Noise) from the MOE, based on their types and on the C of A exemptions provided under O.Reg. 524/98.

Operation of the Union Gas valve / gate station would be covered under Union Gas' province-wide Certificate of Approval 1949-7KRMC5.

Further west behind these uses is the open space of the hydro corridor.

To the east of the subject property along Rifle Range Road are the following uses:

- Sherwin-Williams paint store (1603 Main Street West)
- Canwest Editorial Services (1603 Main Street West)
- Centre for String Playing (1603 Main Street West)
- St. Charles Adult Education and Daycare (1603 Main Street West)
- AIM Medical Clinic
- Fortinos grocery store (1579 Main Street West)

Commercial
Commercial
Educational
Educational
Commercial
Commercial
Harmonizing the Built and Natural Environments

None of these uses have significant noise sources associated with them. None have, or would require Certificates of Approval (Air & Noise) from the MOE, based on their types and on the exemptions provided under O.Reg 524/98.

Directly to the south of the 17 Ewen Road property is:

- the Cadbury Adams Canada Ltd. facility (45 Ewen Road)  Industrial, Food(Candy)

The Cadbury facility currently operates under Certificate of Approval 7305-5WHJK3.

In summary, only two facilities in the area have C of As, as shown in Table 3. Figures 2 and 3 show the Cadbury plant and Union Gas station, respectively.

Table 3: Certificates of Approval for Facilities Within 300 m of 17 Ewen Road

<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
<th>Certificate of Approval and Issue Date</th>
<th>Distance To Subject Property (From Property Line To Property Line)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union Gas</td>
<td>22 Ewen Road</td>
<td>1949-7KRMCS5 November 28, 2008</td>
<td>30 m</td>
</tr>
<tr>
<td>Cadbury Adams Inc</td>
<td>45 Ewen Road</td>
<td>7305-5WHJK3 February 25, 2004</td>
<td>Adjacent</td>
</tr>
</tbody>
</table>

Of the two, noise from the Union Gas gate station is insignificant. The major potential source of "industrial" noise impacts in the area is the Cadbury facility. The focus of the assessment will be on Cadbury operations.

Cadbury’s existing C of A covers three natural-gas fired boilers, seven air handling units and five unit heaters. The C of A is basic in form. No supporting documents required for submission with the C of A application are listed. It does not appear that noise was considered in the C of A assessment, as was required at the time of the application. There are no requirements for an acoustic audit or acoustic assessment report.

2.2 Industrial Classification of Cadbury Facility

Novus personnel conducted site visits of the area on October 27, 2010, and on November 5, 2010, and were also involved in the assessment work which was completed by RWDI AIR Inc. in 2007 and 2009.

Novus agrees with the Pinchin Report in that the Cadbury is a Class 2 "Medium" industry, and that under D-6 guidelines, the following setback distances apply:

- Area of Influence: 300 m
- Recommended Minimum Setback Distance 70 m
2.3 Existing Sensitive Land Uses Surrounding Cadbury Facility

Figures 4 and 5 show the area surrounding the Cadbury facility at 1:5000 and 1:2500 scales. The 70 m recommended minimum setback distance and 300 m area of influence are shown.

The Cadbury plant is surrounded by noise-sensitive land uses, including:

- existing residential uses and schools to the south,
- a chapel/funeral home to the west (United Hebrew Memorial Chapel), and
- an adult educational school / daycare centre to the west (St. Charles Adult Education and Daycare)

As can be seen in Figure 5, fifteen existing residences and the United Hebrew Memorial Chapel are located within the recommended minimum setback distance of 70 m. Residences are directly adjacent to the rear property line of the Cadbury plant. The United Hebrew Memorial Chapel is directly across the street from the warehouse shipping and receiving area.

2.4 Planning Classification of Surrounding Area

Based on discussions with GSP Group planners, and based on their review of the Hamilton Official Plan and the applicable area Secondary Plan, the neighbourhood is an "area of transition" from industrial to mixed commercial and residential uses.

2.5 Cadbury Compliance Status

Section 9 of the Environmental Protection Act states that an amendment or new Certificate of Approval is required to:

“(a) construct, alter, extend or replace any plant, structure, equipment, apparatus, mechanism or thing that may discharge or from which may be discharged a contaminant into any part of the natural environment other than water; or

(b) alter a process or rate of production with the result that a contaminant may be discharged into any part of the natural environment other than water or the rate or manner of discharge of a contaminant into any part of the natural environment other than water may be altered.”

Thus, a C of A must be amended for any process change or update, or change to the physical plant of an industry.

From postings on the Environmental Bill of Rights Registry (the EBR), Cadbury applied for a Comprehensive Certificate of Approval (Air & Noise) for the site in 2008. A Comprehensive C of A allows flexibility in changes to operations without the need to continually reapply to the MOE for approval, but requires the applicant to conduct their own assessments and submit annual reports showing compliance with air quality and
Harmonizing the Built and Natural Environments


The local District Office of the MOE was contacted to discuss Cadbury’s compliance status. The discussions revealed that the Comprehensive C of A application was withdrawn to allow for Cadbury to conduct the required acoustical assessment studies.

A review of the complaint history for the site show no odour complaints, and only one noise complaint related to construction noise.

A Freedom of Information (FOI) request concerning the Cadbury facility was filed with the MOE. No information has been received back at the time of publication.

An extensive expansion to the Cadbury facility took place since 2007, and was still underway in December of 2010. It would appear that this was done without obtaining the required MOE approval (as the application was withdrawn).

From the above, the following would appear to be true:

- Cadbury has significantly altered its operations since its 2004 C of A was granted.
- A 2008 Comprehensive C of A application was withdrawn when the MOE notified Cadbury that a noise assessment was required.
- Based on the work conducted by RWDI in 2007, Cadbury should have known or ought to have known that noise at existing surrounding receptors was an issue, as is discussed in detail in subsequent sections.
- Cadbury has failed to submit a new C of A application (including a noise report) for the facility since 2008 to cover the changes it has made to its operations.
- The subsequent modifications to the facility were therefore not covered under a valid Certificate of Approval.

2.6 Assessment Requirements and Recommendations Under D-6

Guideline D-6 requires that studies be conducted to assess impacts where sensitive land uses are proposed within the Area of Influence of an industrial facility. The proposed residence is within the area of influence; therefore, a detailed study is required, and is provided in this report. For noise, Section 4.6.1 requires that the study address MOE Publication LU-131 guidelines.

Guideline D-6 also recommends that no sensitive land use be placed within the recommended minimum setback distance. However, it should be noted that this is a recommendation only. Section 4.10 of the Guideline allows for development within the separation distance, in cases of redevelopment, infilling, and transitions to mixed use, provided that the appropriate studies are conducted and that the relevant air quality and noise guidelines are met. This is consistent with previous OMB decisions on setback distances (OMB PL030635, the “Jane-Ruth” decision).
Thus, several statements in the Pinchin Report regarding D-6 requirements are incorrect. Guideline D-6 does not recommend a 300 m buffer distance for Class 2 industries. The 70 m minimum setback is a recommendation, and not a requirement, and in fact, several existing sensitive uses are located within the 70 m setback, including existing residences directly adjacent to the Cadbury property line, and existing placers of worship.

Thus, the proposed development is not "in contravention" of Guideline D-6. The proposed development will meet the requirements of Guideline D-6 provided that the requirements of LU-131 are met.
3.0 Environmental Noise Guidelines

There are several noise guidelines which apply to this project:

3.1 Publication LU-131: Noise Assessment in Land Use Planning

Ministry of the Environment Publication LU-131 sets out the specific limits which apply to noise sensitive land uses, including new residential development, schools, hospitals, and places of worship (MOE 1997a,b,c). LU-131 sets out sound level limits for road and rail noise, aircraft noise and “stationary” industrial noise sources.

The acoustical environment in the area of the subject lands is dominated by road traffic noise from Main Street, and by stationary industrial noise from Cadbury operations.

“Stationary noise” limits for industrial facilities apply at the exterior facade, rather than to indoor noise levels. The applicable limits for Class 1 Urban areas are provided below:

<table>
<thead>
<tr>
<th>Type of Space</th>
<th>Time Period</th>
<th>Stationary Source Noise Limit (L&lt;sub&gt;eq&lt;/sub&gt; (1-hr), dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor point of reception in any area amenable for use; or</td>
<td>Daytime (0700-2300h)</td>
<td>50; or The background due to road traffic, whichever is higher.</td>
</tr>
<tr>
<td>Plane of Window for Living Spaces</td>
<td>Daytime (0700-2300h)</td>
<td>50; or The background due to road traffic, whichever is higher.</td>
</tr>
<tr>
<td>Plane of Window for Bedrooms</td>
<td>Night-time (2300-0700h)</td>
<td>45; or The background due to road traffic, whichever is higher.</td>
</tr>
</tbody>
</table>

Limits for outdoor points of reception do not apply in this case, as there are no outdoor amenity areas (no “areas amenable for use”).

The rear facade of the proposed 17 Ewen Road building, which is fully exposed to Cadbury-related noise, is well-shielded from road traffic noise from Main Street. Therefore, the minimum 50 dBA daytime / 45 dBA night-time sound level limits would apply.

3.1.1 Noise Mitigation Measures

Under LU-131, noise mitigation at the source of the noise is preferred. Air conditioning and sealed windows are generally not considered as an appropriate noise mitigation measure for stationary, industrial sources except in very specific circumstances.

Section A.2.4.1 states that central air conditioning and sealed non-operable windows may be appropriate in the following situation (MOE 1997b):
...Central air conditioning in conjunction with sealed (inoperable) windows may, in some cases, be also considered as a possible mitigation option for high-rise multiple-unit residential uses, particularly if these uses were deemed to be temporary residential uses. The appropriateness of air conditioning and sealed windows as mitigation measures in such uses would need to be assessed on an individual basis.”

The factors on which the acceptability of air conditioning and sealed windows as mitigation include:

- sound level in the plan of a window versus the applicable criteria
- potential for interference with the facility’s ability to obtain and maintain a Certificate of Approval
- the type of area. “A high-rise development in an area which is undergoing transition from industrial to residential is more compatible with the use of central air conditioning.”

Under LU-131, the plane of window criteria does not apply if central air conditioning and sealed windows are found to be an acceptable solution. The windows are no longer considered to be “points of reception” for noise.

As will be discussed further in this report, it is Novus’ opinion that these three factors are met for this proposed development, and receptor based noise mitigation is acceptable for the 17 Ewen Road development.

3.2 Publication NPC-205: Sound Level Limits for Stationary Sources in Urban Areas

In order to obtain or maintain a Certificate of Approval, regulated industries must show that noise emissions from their facilities are in compliance with MOE Publication NPC-205 requirements.

The guideline limits for stationary noise under NPC-205 are presented in Table 5. The limits are generally similar to LU-131. Again, due to screening of road traffic by the proposed residence itself, the minimum limits would apply in assessing Cadbury noise impacts.
**Table 5: NPC-205 Noise Guideline Limits**

<table>
<thead>
<tr>
<th>Point of Reception</th>
<th>Time Period</th>
<th>Stationary Source Noise Limit (L_{eq} (1-hr), dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Point of Reception&quot; means any point on the premises of a person where sound or vibration originating from other than those premises is received.</td>
<td>Daytime (0700-1900h)</td>
<td>50; or The background due to road traffic, whichever is higher.</td>
</tr>
<tr>
<td></td>
<td>Evening (1900-2300h)</td>
<td>47; or The background due to road traffic, whichever is higher.</td>
</tr>
<tr>
<td></td>
<td>Night-time (2300-0700h)</td>
<td>45; or The background due to road traffic, whichever is higher.</td>
</tr>
</tbody>
</table>

The guidelines apply to both existing uses and "zoned for future use" uses as well. Included in the definition of "points of reception" in the guideline are:

- permanent or seasonal residences,
- hotels/motels,
- nursing/retirement homes,
- rental residences, hospitals,
- camp grounds, and
- noise sensitive buildings such as schools and places of worship.

Thus, the existing residences surrounding the Cadbury facility, as well as the schools and the United Hebrew Memorial Chapel, would all qualify as points of reception for noise.

### 3.2.1 Differences Between LU-131 AND NPC-205

There is a disconnect between the definitions of "point of reception" in LU-131 and NPC-205. Under LU-131, the point of reception is defined as the plane of windows leading into noise sensitive spaces. Furthermore, as discussed, in certain instances, sealed windows may be used to remove the point of reception. However, under NPC-205, the definition is much more general, and applies to "any point on the premises". Receptor-based control measures are thus generally not allowed under NPC-205.

Therefore, a facility could theoretically be in compliance for noise under LU-131, but found to be out of compliance with their C of A requirements under NPC-205.

This situation is a serious concern with residential buildings / developments, where home owners may readily change their windows to operable versions at a later date, removing the required mitigation measure.

This is less of a concern for high-rise institutional land uses such as the proposed development, where central air conditioning and sealed windows are a key design feature. In many such instances in the past, the Ministry has allowed sealed windows /
central air conditioning as a receptor-based control measure for NBPC-205 / C of A compliance purposes.

Recently, the MOE has agreed to allow receptor-based mitigation measures into Certificates of Approval when dealing with sensitive residential land uses directly adjacent to Class 3 heavy industrial uses. (OMB PL030514, East Bayfont – West Precinct).

3.3 Draft Publication NPC-300: Environmental Noise Guideline

The MOE also has recently undertaken a review of LU-131 and NPC-205, with the intent to replace both documents with a new “Publication NPC-300”, which is intended to clarify the use of receptor-based noise mitigation, and to explicitly allow receptor-based noise mitigation for C of A purposes.

The new guideline would apply for both Certificate of Approval and Land Use Planning purposes.

3.3.1 Guidelines for Class 4 Areas

A key feature of the new guideline is the creation of a new land use areas including “Class 4” areas, which:

- are intended for new noise-sensitive uses,
- are in proximity to existing, legitimately established stationary sources (industries)
- are designated by the land use planning approval authority for new development or redevelopment.

The area in question for this application meets all of the above requirements. For a Class 4 Area designation to be used, the Planning Department would also need to officially designate the area as “Class 4”.

The applicable guideline limits are then shown below:
Harmonizing the Built and Natural Environments

Table 6: Exclusion Limits for Class 1 and Class 4 Areas Under NPC-300

<table>
<thead>
<tr>
<th>Space</th>
<th>Time of Day</th>
<th>Exclusion Limits*</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Class 1 Areas</td>
<td>Class 4 Areas</td>
<td></td>
</tr>
<tr>
<td>Outdoor Points of Reception</td>
<td>0700-1900h</td>
<td>50</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1900-2300h</td>
<td>50</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2300-0700h</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Living Spaces: Living/ dining rooms, dens, kitchens</td>
<td>0700-1900h</td>
<td>50</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1900-2300h</td>
<td>50</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2300-0700h</td>
<td>45</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Sleeping Quarters</td>
<td>0700-1900h</td>
<td>50</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1900-2300h</td>
<td>50</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2300-0700h</td>
<td>45</td>
<td>55</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
* The levels in the table or the background ambient sound level due to road traffic, whichever is higher.

The NPC-300 limits for Class 4 areas assume that building is air-conditioned, and that therefore the windows will generally remain closed. A 10 dB “leeway” is given over the regular Class 1 Area limits. Note that the windows are not required to be sealed, as is the case in Publication LU-131.

In the case that the above limits cannot be met, the draft guideline also allows for the use of additional mitigation in the form of “Enclosed Noise Buffer Balconies” (ENB balconies). These would be enclosed “solarium”-type balconies with full glazing and limited operable windows (to the maximum allowed in the Ontario Building Code). The balconies would overlap sensitive windows and essentially act as a "secondary skin facade", providing an initial reduction in noise prior to impacting the window on the sensitive space.

3.3.2 Implementation

The guidelines completed their 60 day review period on the Environmental Bill of Rights registry on January 15, 2011. It is currently uncertain what the timeline is for the Ministry to address comments and revise and implement the guideline, and what form the final guideline will take. Regardless, the draft does represent the MOE’s current thinking on guideline application.

3.4 City of Hamilton Noise Bylaw

The City of Hamilton Noise Bylaw 03-020 also regulates noise within the City. The following provisions would apply to Cadbury operations:
2 No person shall cause or permit the emission of a sound likely to disturb another between 9:00 pm and 7:00 am of the following day.

... 

8 No person shall cause or permit the emission of sound resulting from the following which is clearly audible at a Point of Reception located in Quiet Areas (between 9:00 pm – 7:00 am) or in Residential Areas (between 11:00 pm – 7:00 am).

(1) Loading, unloading, delivering, packing, unpacking, or otherwise handling any containers, produce, materials, or refuse whatsoever.

... 

11 No person shall emit or cause or permit the emission of sound resulting from:

(1) a Stationary Source such that the level of resultant sound at a Point of Reception exceeds the applicable sound level limit prescribed in:

(a) Publication NPC-205 – Sound Level Limits for Stationary Sources in Class 1 and 2 Areas (Urban);

... 

Thus, loading and unloading activities from Cadbury’s operations are constrained by the Noise bylaw to being inaudible at existing residential receptors in the area. Compliance with NPC-205 is also required by the bylaw.

3.5 Guideline Summary

- The applicable noise guideline for the proposed 17 Ewen development is application is LU-131
- As part of their Certificate of Approval obligations, Cadbury will be required to meet NPC-205 guideline limits at the both the proposed development and at existing surrounding noise sensitive receptors.
- Cadbury is also required ensure that NPC-205 guidelines are met at existing and future receptors by the City’s Noise Bylaw.
- Publication LU-131 and NPC-205 are generally consistent with each other. The main differences relate to the use of receptor-based noise mitigation.
- Recently, the MOE has allowed for receptor-based noise mitigation in Certificates of Approval where the receptors were "high-rise" residences.
- Recently, the MOE has undertaken to revise and replace the two guidelines with NPC-300, a draft of which has been created. The draft guideline allows for receptor-based noise mitigation and for higher noise limits in areas of transition from industrial to residential.
- Based on the MOE’s recent actions, it is clear that receptor-based noise mitigation measures can be used for land-use planning applications such as this one.
4.0 NOISE STUDY

An environmental noise assessment was conducted to investigate the potential for impacts on the proposed 17 Ewen Road building.

A site visit was conducted on November 5, 2010. Noise sources at the facility were identified from the street, and short-term noise measurements were conducted.

Noise predictions from the 2007 RWDI noise assessment results were recreated and updated to match the new observations and the current facility layout.

4.1 Noise Sources of Interest At Cadbury

Figure 6 presents an aerial view of the Cadbury facility, and highlights the noise sources of interest.

At the north of the facility, there is a product warehouse, including a shipping/receiving area with 8 bays. There is also a trailer parking area with space for an additional 6 trailers. During hot summer months, these trailers may use Trailer Refrigeration Units, also called TRU’s or “reefers”, to cool their contents to prevent spoiling. See Figure 2. Reefer units are typically powered by small diesel engines, and can be quite loud.

Main production at the facility occurs within the central and southern portions of the building. There are several rooftop refrigeration condenser units (fan aircoils), seven air handling units, three steam boilers, and numerous ventilation exhausts and sidewall vents and air intakes.

Bull unloading of supplies takes place in the eastern courtyard area. In 2007 three storage tanks were located in the courtyard. Bulk transfers were made by truck, using truck-mounted pneumatic blowers. Blower motors can be a significant source of noise. In the recent expansion, the three tanks were removed and two new tanks have been constructed. It is unknown if truck mounted blowers are still used, or if a dedicated on-site pneumatic system is used.

4.2 Measured Noise Levels From Cadbury Operations – November 5, 2010

Noise measurements were conducted on November 5, 2010. Measurements at several points along the perimeter of the facility, on publically accessible lands, were conducted.

Noise from the Cadbury facility was clearly audible and dominated the measurements at all locations. Some constriction activity was taking place at Cadbury during the measurement period. However, the activity was not major, and noise from the construction activity was generally inaudible off-site.
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No "reefer" units were in operation during the measurements. Similarly, no bulk unloading activities were taking place during the measurement period. Thus, the measurements by themselves do not represent "predictable worst-case" impacts. Cadbury related noise was primarily from rooftop ventilation fans and from side-wall air intakes and exhausts.

Measurement results are summarized in Figure 7. Measured sound levels along the east of the facility (along Rifle Range Road) range up to 71 dBA.

Elevated sound levels in excess of the 45/50 dBA guideline limits are experienced throughout the residential areas to the south of the facility. That is to say, measured Cadbury-facility related noise levels were well in excess of the applicable NPC-205 guideline limits at existing noise sensitive receptors.

A measured sound level of 50 dBA was obtained at the southern ground level facade of the existing 17 Ewen Road building.

4.3 Updated Noise Modelling

Noise modelling contours (isopleths of equal noise levels) for the Cadbury facility, based on 2007 noise measurements and modelling conducted by RWDI, were contained in RWDI’s May 2009 report.

The noise emission data from this report have been used to update the noise modelling to match current observations (through the addition of new ventilation sources, measureable from the road) and to update the building configuration.

The noise modelling is intended to capture "predictable worst-case impacts" from all Cadbury activity. These results may be conservative, in that they are based on noise emission data from 2007, which would not capture any changes or improvements made by Cadbury in the intervening 3 years. They are however, consistent with Novus’ 2010, measurements, in that they show extensive impacts at existing noise sensitive receptors.

Figure 8 shows the location of modelled noise receptors surrounding the Cadbury facility. Noise Receptors NR-1 through NR-8 represent existing residences and the United Memorial Hebrew Chapel. Receptors NR-9 and NR-10 model impacts at the proposed 17 Ewen Road building. Multiple receptors at each floor were used for NR-9 and NR-10.

4.3.1 Noise Modelling Results

Noise modelling results are shown in the table below. The worst-case (highest) values for NR-9 and NR-10 (representing the highest predicted sound level at the various floor heights) are shown:
### Harmonizing the Built and Natural Environments

**Table 7: Noise Modelling Predictions, Unmitigated**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NR-1: United Memorial Hebrew Chapel</td>
<td>Daytime</td>
<td>73</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>NR-2: Existing Ewen Road Residence</td>
<td>Daytime</td>
<td>60</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>60</td>
<td>45</td>
<td>No</td>
</tr>
<tr>
<td>NR-3: Existing Ewen Road Residence</td>
<td>Daytime</td>
<td>64</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>64</td>
<td>45</td>
<td>No</td>
</tr>
<tr>
<td>NR-4: Existing Ewen Road Residence</td>
<td>Daytime</td>
<td>59</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>59</td>
<td>45</td>
<td>No</td>
</tr>
<tr>
<td>NR-5: Existing Ewen Road Residence</td>
<td>Daytime</td>
<td>57</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>57</td>
<td>45</td>
<td>No</td>
</tr>
<tr>
<td>NR-6: Existing Ewen Road Residence</td>
<td>Daytime</td>
<td>56</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>56</td>
<td>45</td>
<td>No</td>
</tr>
<tr>
<td>NR-7: Existing Rifle Range Road Residence</td>
<td>Daytime</td>
<td>58</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>58</td>
<td>45</td>
<td>No</td>
</tr>
<tr>
<td>NR-8: Existing Rifle Range Road Residence</td>
<td>Daytime</td>
<td>57</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>57</td>
<td>45</td>
<td>No</td>
</tr>
<tr>
<td>NR-9: Proposed 17 Ewen Road Residence</td>
<td>Daytime</td>
<td>62</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>62</td>
<td>45</td>
<td>No</td>
</tr>
<tr>
<td>NR-9: Proposed 17 Ewen Road Residence</td>
<td>Daytime</td>
<td>65</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>60</td>
<td>45</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes:
- Daytime – worst-case daytime operations, between 0700 and 2300h, including bulk unloading
- Night-time – worst-case night-time operations, between 2300 and 0700h.

Noise from Cadbury operations are predicted and are measured to be in excess of applicable NPC-205 guideline limits at the existing noise sensitive receptors. **Figures 9 and 10** show the noise modelling results in the form of isopleths of equal noise level ("noise contours").

Concern had previously been raised by Cadbury that reflections from the proposed 17 Ewen building would increase noise levels to the south and make it more difficult to mitigate at existing receptors. **Figure 11** provides a comparison between the noise modelling with existing buildings and with the proposed future 17 Ewen building.

In the future scenario with the proposed 17 Ewen Road residential building in place, the position of the noise contours are slightly shifted to the south in some locations. This is due to reflections off of the new higher building facade. However, the change at any given location will be a fraction of a decibel, and is therefore insignificant and would not affect mitigation requirements for existing locations.
4.4 Noise Mitigation Measures Required to Achieve Compliance at Existing Receptors

Noise mitigation of Cadbury operations is required to bring the facility into compliance with NPC -205 guidelines at existing receptors. Mitigation measures on several sources are required, as outlined in the following table.

**Table 8: Noise Mitigation Required for Compliance at Existing Receptors**

<table>
<thead>
<tr>
<th>Noise Sources</th>
<th>Attenuation Required</th>
<th>Potential Noise Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigeration Trucks</td>
<td>26 to 30 dB</td>
<td>Combinations of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provide “hotel” electrical power for refeer units, rather than operating their diesel motors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Portable partial enclosures around ends of refeer trailers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Noise Barriers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Refrigerated garage for trailer loading and storage</td>
</tr>
<tr>
<td>Cooling Towers</td>
<td>10 dB</td>
<td>Combinations of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- inlet and outlet silencers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- low noise fans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- noise barriers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- replacement with quieter high-performance units</td>
</tr>
<tr>
<td>Rooftop Air Handling Units (Hussman, Carrier and Trane units)</td>
<td>10 dB</td>
<td>Combinations of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- inlet and outlet silencers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- low noise fans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- noise barriers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- replacement with quieter high-performance units</td>
</tr>
<tr>
<td>Exhaust Stacks (EF01-05,07,09,10)</td>
<td>10 to 30 dB</td>
<td>- Exhaust stack silencers (mufflers)</td>
</tr>
<tr>
<td>Boilers</td>
<td>10 dB</td>
<td>- Exhaust stack silencers (mufflers)</td>
</tr>
<tr>
<td>Side Wall Vents on East Facade</td>
<td>15 dB</td>
<td>- Acoustic louvres or short silencers (mufflers)</td>
</tr>
<tr>
<td>Blower Truck Unloading</td>
<td>10 dB</td>
<td>Combinations of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- silencers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- noise barriers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- replacement with quieter high-performance units</td>
</tr>
</tbody>
</table>

Once the above mitigation measures are in place, Cadbury facility noise will be in compliance at all existing noise sensitive receptors. Mitigated modelling results are shown in the following table.
Harmonizing the Built and Natural Environments

Table 9: Noise Modelling Predictions, Mitigated for Existing Receptors

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NR-1: United Memorial Hebrew Chapel</td>
<td>Daytime</td>
<td>50</td>
<td>50</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>NR-2: Existing Ewen Road Residence</td>
<td>Daytime</td>
<td>45</td>
<td>50</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>45</td>
<td>45</td>
<td>Yes</td>
</tr>
<tr>
<td>NR-3: Existing Ewen Road Residence</td>
<td>Daytime</td>
<td>44</td>
<td>50</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>44</td>
<td>45</td>
<td>Yes</td>
</tr>
<tr>
<td>NR-4: Existing Ewen Road Residence</td>
<td>Daytime</td>
<td>44</td>
<td>50</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>44</td>
<td>45</td>
<td>Yes</td>
</tr>
<tr>
<td>NR-5: Existing Ewen Road Residence</td>
<td>Daytime</td>
<td>42</td>
<td>50</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>42</td>
<td>45</td>
<td>Yes</td>
</tr>
<tr>
<td>NR-6: Existing Ewen Road Residence</td>
<td>Daytime</td>
<td>42</td>
<td>50</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>42</td>
<td>45</td>
<td>Yes</td>
</tr>
<tr>
<td>NR-7: Existing Rifle Range Road Residence</td>
<td>Daytime</td>
<td>44</td>
<td>50</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>44</td>
<td>45</td>
<td>Yes</td>
</tr>
<tr>
<td>NR-8: Existing Rifle Range Road Residence</td>
<td>Daytime</td>
<td>43</td>
<td>50</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>43</td>
<td>45</td>
<td>Yes</td>
</tr>
<tr>
<td>NR-9: Proposed 17 Ewen Road Residence</td>
<td>Daytime</td>
<td>50</td>
<td>50</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>49</td>
<td>45</td>
<td>No</td>
</tr>
<tr>
<td>NR-9: Proposed 17 Ewen Road Residence</td>
<td>Daytime</td>
<td>56</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>52</td>
<td>45</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes:
Daytime – worst-case daytime operations, between 0700 and 2300h, including bulk unloading
Night-time – worst-case night-time operations, between 2300 and 0700h.

Once the Cadbury facility is in compliance at existing receptors, the residual impacts will be small.

4.5 Additional Noise Mitigation Measures Required to Achieve Compliance at 17 Ewen Road

The additional mitigation measures required to achieve compliance at the proposed 17 Ewen Road residence as well as at the existing noise sensitive receptors is outlined in the following table:
Table 10: Additional Noise Mitigation Required for Compliance at 17 Ewen Road

<table>
<thead>
<tr>
<th>Noise Sources</th>
<th>Attenuation Required</th>
<th>Potential Noise Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling Towers</td>
<td>15 dB (+5 dB from Existing)</td>
<td>Combinations of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- inlet and outlet silencers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- low noise fans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- noise barriers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- replacement with quieter high-performance units</td>
</tr>
<tr>
<td>Additional Rooftop Air Handling Units</td>
<td>5 dB</td>
<td>Combinations of:</td>
</tr>
<tr>
<td>(Blanchard)</td>
<td></td>
<td>- inlet and outlet silencers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- low noise fans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- noise barriers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- replacement with quieter high-performance units</td>
</tr>
<tr>
<td>Additional Exhaust Stacks (EF07,08,11,12)</td>
<td>10 dB</td>
<td>- Exhaust stack silencers (mufflers)</td>
</tr>
<tr>
<td>Boilers</td>
<td>15 dB (+5 dB from Existing)</td>
<td>- Exhaust stack silencers (mufflers)</td>
</tr>
<tr>
<td>Side Wall Vent on North Facade</td>
<td>15 dB</td>
<td>- Acoustic louvres or short silencers (mufflers)</td>
</tr>
<tr>
<td>Blower Truck Unloading</td>
<td>20 dB (+10 dB from Existing)</td>
<td>Combinations of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- silencers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- noise barriers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- replacement with quieter high-performance units</td>
</tr>
</tbody>
</table>
5.0 RECOMMENDED NOISE MITIGATION FOR THE 17 EWEN ROAD SITE

Several existing noise sensitive receptors are adjacent to the Cadbury facility. Based on the noise assessment work conducted in this report, noise from Cadbury operations exceeds the applicable NPC-205 guideline limits at these receptors.

Cadbury already has an existing obligation to meet NPC-205 requirements at existing receptors, both under the City’s noise bylaw, and as a requirement to obtain a current Certificate of Approval under the Environmental Assessment Act. Cadbury will be required to mitigate noise impacts at the existing receptors as part of any future Certificate of Approval application. In fact, Cadbury withdrew its 2008 Comprehensive Certificate of Approval application to allow for them to conduct the required acoustical assessments.

Should Cadbury mitigate noise levels from their operations to meet NPC-205 limits at the existing noise sensitive receptors, the majority of the impacts at the proposed 17 Ewen Road building would be addressed. Minimal additional noise mitigation would be required.

Worst-case existing, unmitigated noise levels at the proposed 17 Ewen Road residence would be 65 dBA daytime / 60 dBA night-time, at the top floor of the residence. Should Cadbury mitigate noise levels at existing residences to meet the guidelines, then the worst-case sound level at the 17 Ewen site would decrease to 56 dBA daytime / 50 dBA night-time.

Given that Cadbury operations are already out of compliance with NPC-205 requirements, and the scope of required mitigation measures at the Cadbury site and timing of their installation is uncertain, on-site mitigation at Cadbury is not a feasible option at this time.

Fortunately, Publication LU-131 allows for receptor-based noise mitigation measures to be installed in circumstances where:

- The area is in transition from industrial to mixed
- the proposed development is high-rise multi-tenant “temporary residential” use
- the sound level excess over the guideline limits is not extreme, and
- the facility’s ability to obtain or maintain its C of A is not adversely affected.

It is Novus’ opinion that all of these tests are met in this case.

From the Official Plan and Secondary Plan, it is clear that this is an area in transition. The proposed use is high-rise and multi-tenant, and will be student accommodation, rather than families living in the building long-term.
Based on our experience, and on the worst-case predicted sound levels, windows and facades meeting Ontario Building Code requirements will be sufficient to ensure that adequate indoor sound levels are met. No special construction would be required.

With the inclusion of air-conditioning and sealed windows along the exposed facade facing Cadbury, the building with cease to be a “point of reception” for noise, and Publication LU-131 requirements will be met.

Finally, Cadbury must already deal with noise emissions to achieve compliance at existing noise-sensitive receptors. Once they have done so, the majority of excess sound levels at the 17 Ewen Road site will also be addressed.

Under the proposed draft NPC-300 noise guideline, the noise guideline limits for “Class 4” area would be met, and no additional noise mitigation would required. Even without the use of Class 4 designation, NPC-300 allows receptor based noise mitigation in the form of “enclosed noise control balconies”.

Current MOE practices are to allow for the use of receptor-based noise mitigation in assessing compliance with NPC-205 requirements. Furthermore, the MOE has proposed revising the guidelines to specifically include receptor-based measures for noise. Thus, it is Novus’ opinion that in this case, the 17 Ewen Road development will not make it more difficult for Cadbury to obtain or maintain the Certificate of Approval.

The proposed mitigation measures would therefore also ensure compliance with the City of Hamilton Noise Bylaw.

With the inclusion of the sealed windows, the potential for complaints from 17 Ewen road residences will be minimized. Despite the close proximity of existing residences to the Cadbury plant, there is no history of noise complaints.

5.1 Summary of Recommendations for Noise

- All windows, including living room windows and bedroom windows facing the Cadbury facility should be sealed.
- The building should have mandatory air conditioning
- The following warning clause should be registered on Title and included in all Occupancy Agreements:

  “Purchasers are advised that, due to the proximity of the Cadbury Adams Inc. facility, sound levels from this facility may at times be audible.”
6.0 CONCLUSIONS

Based on the results of our studies, the following conclusions have been reached:

- An assessment of stationary noise impacts has been conducted. Based on measurements and noise predictions, applicable NPC-205 guidelines are exceeded at existing noise sensitive receptors (a place of worship and residences) in the area.
- Publication LU-131 and NPC-205 guidelines may be exceeded at the proposed development.
- Should Cadbury mitigate noise to meet the guideline limits at existing receptors, some minor excesses of the guideline limits may still occur at the proposed residence.
- Given the excesses at existing receptors, it is not feasible to outline a source-based noise mitigation plan to reduce noise from Cadbury sources.
- Therefore, in accordance with the provisions of LU-131, receptor-based noise mitigation in the form of air-conditioning and sealed windows is recommended. See Section 5.1 With the inclusion of these measures, Publication LU-131 and NPC-205 limits are met.
- Regardless if Cadbury mitigates noise from their operations, the proposed receptor based mitigation plan would adequately reduce noise impacts. The proposed mitigation plan would meet existing LU-131 requirements, and would meet the requirements of the draft NPC-300 guideline.
- Given the existing conditions, including the presence of surrounding existing residential land uses, the conversion of the subject property to residential should not affect Cadbury’s ability to obtain or maintain their Certificates of Approval.
- The requirements of the City of Hamilton Noise Bylaw will be met.
- The requirements of MOE Guidelines D-1 and D-6 are met.

Should you have any questions or concerns, please do not hesitate to contact the undersigned.

Sincerely,
Novus Environmental Inc.

[Signature]

R. L. Scott Penton, P.Eng.,
Principal

[Stamp]
7.0 REFERENCES

City of Hamilton Noise Bylaw No. 03-020, To Regulate Noise

Ontario Ministry of the Environment (MOE 1977a), Publication NPC-103: Procedures, published under the Model Municipal Noise Control Bylaw

Ontario Ministry of the Environment (MOE 1977b), Publication NPC-104: Adjustments, published under the Model Municipal Noise Control Bylaw

Ontario Ministry of the Environment (MOE 1995a), Guideline D-1, Land Use Compatibility

Ontario Ministry of the Environment (MOE 1995b), Guideline D-6, Compatibility Between Industrial Facilities and Sensitive Land Uses

Ontario Ministry of the Environment (MOE 1995c), Publication NPC-205: Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban)

Ontario Ministry of the Environment (MOE 1995d), Publication NPC-233: Information to be Submitted for Approval of Stationary Sources of Sound

Ontario Ministry of the Environment (MOE 1997a), Publication LU-131: Noise Assessment Criteria In Land Use Planning

Ontario Ministry of the Environment (MOE 1997b), Annex to Publication LU-131: Noise Assessment Criteria In Land Use Planning

Ontario Ministry of the Environment (MOE 1997b), Noise Assessment Criteria In Land Use Planning: Requirements, Procedures and Implementation
Harmonizing the Built and Natural Environments

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This page intentionally left blank for 2-sided printing purposes
You have applied in accordance with Section 9 of the Environmental Protection Act for approval of:

- three (3) natural gas fired boilers, seven (7) air handling units, and five (5) unit heaters, all having a combined heat input of 59.5 Gigajoules per hour;

all in accordance with the Application for a Certificate of Approval (Air) dated October 21, 2003 and signed by Mr. Jack Robertson (Asset Care Manager), Cadbury Trebor Allan Inc., and all supporting information associated with the application.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

(1) "Equipment" means the natural gas fired combustion equipment described in the Company's application, this Certificate and in the supporting documentation referred to herein, to the extent approved by this Certificate; and

(2) "Owner" means Cadbury Trebor Allan Inc., and includes its successors and assignees.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. Except as otherwise provided by these Conditions, the Owner shall design, build, install, operate and maintain the Equipment in accordance with the description given in this Certificate, the application for approval of the Equipment and the submitted supporting documents and plans and specifications as listed in this Certificate.

2. Where there is a conflict between a provision of any submitted document referred to in this Certificate and the Conditions of this Certificate, the Conditions in this Certificate shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

The reasons for the imposition of these terms and conditions are as follows:

1. Conditions No. 1 and 2 are imposed to ensure that the Equipment is built and operated in the manner in which they were described for review and upon which approval was granted. These conditions are also included to emphasize the precedence of Conditions in the Certificate and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Section 9, Environmental Protection Act
Ministry of Environment and Energy
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

* Further information on the Environmental Review Tribunal’s requirements for an appeal can be obtained directly from the Tribunal at:
Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted works are approved under Section 9 of the Environmental Protection Act.

DATED AT TORONTO this 25th day of February, 2004

Aziz Ahmed, P.Eng.
Director
Section 9, Environmental Protection Act

Av

c: District Manager, MOE Hamilton - District
INTRODUCTION
This memo has been prepared in regards to noise issues that are predicted to occur at a future residential building proposed by Auburn Developments (Auburn), located at 17 Ewen Road in Hamilton, Ontario. The main source of industrial noise that will impact the residence is the Cadbury Adams (Cadbury) candy and confections manufacturing facility located to the south of the site. A detailed noise assessment of the Cadbury facility has been completed, and recommendations for both the Cadbury facility and Auburn are presented.

BACKGROUND
Auburn Developments has proposed to construct a residential building at 17 Ewen Road in Hamilton, Ontario. The site is not currently zoned for residential use and currently is occupied by a public storage facility. As part of rezoning, the City of Hamilton has requested that a noise study be completed. The criteria for this study are set out in the Ministry of the Environment (MOE) guideline LU-131 for land use planning. The applicable guidelines for evaluating noise impacts from “stationary” sources in a land-use planning context are the MOE’s Publication LU-131 guideline limits. These guidelines state that one-hour average sound exposures from facility operations should not exceed that of the background, where the background is defined as the ambient sound levels present in the environment without the facility operating, or set minimum levels depending on the nature of the area. While the guideline is no longer directly enforced by the MOE, municipalities tend to use LU-131 to provide guidance in land-use planning decisions and these guidelines are accepted by the Ontario Municipal Board for decisions with regard to land use disputes.

The building proposed for the site is anticipated to be subject to environmental noise impacts from the surrounding transportation and industrial noise sources. Industrial noise results from the Cadbury facility located to the south of the site, at 45 Ewen Road, and from a Union Gas metering station across Ewen Road to the west. Road noise results primarily from Main Street, to the north. When the impacts from transportation or from industrial sources exceed the limits set out in LU-131, they should be mitigated to ensure an adequate noise environment for the residents of the proposed building. Noise impacts from transportation sources have been assessed and reported separately from this memo. This memo deals with noise from the adjacent Cadbury and Union Gas facilities only.
The background sound levels used to establish the applicable guideline limits for industrial noise were obtained through measurement. Long-term sound level measurements were conducted in October 2006 at the 17 Ewen Road site. Results indicated that MOE guideline minimum sound level limits of 50 dBA and 45 dBA apply for daytime and night-time periods, respectively. These limits are the maximum cumulative sound level that the Cadbury facility can create at noise sensitive receptors in the area and still comply with MOE guidelines.

ANALYSIS OF CADBURY FACILITY

Initial analysis of industrial noise impacts from Cadbury indicated that detailed analysis was necessary. The detailed analysis was based on source-specific noise emission data and modelling. Measurements of the individual noise sources at Cadbury were conducted by RWDI personnel in March 2007. Using sound measurement data, published manufacturer’s sound data, and engineering calculations, a model representative of Cadbury’s noise emissions was created.

The model confirmed the initial analysis that Cadbury’s noise impacts are above the LU-131 limits at the proposed Auburn development. Since Auburn is proposing to rezone the land at 17 Ewen to residential, under LU-131 guidelines, it is Auburn’s responsibility to ensure that sound levels meet the MOE guideline limits on their property. To meet this requirement, it is normally most cost-effective that noise mitigation measures be installed at the source of the noise.

Our assessment also leads us to believe that Cadbury may have reason to work cooperatively with Auburn in reducing their noise emissions. Cadbury is required to have a Certificate of Approval (CoF) from the MOE for operations at their site. However it is not clear if Cadbury has a CoF. If Cadbury were to apply for a new Certificate of Approval, the MOE would expect Cadbury to ensure that sound levels meet the MOE Publication NPC-205 noise guideline limits at the existing noise sensitive receptors. Based on the information available, Cadbury’s noise emissions at the nearest existing houses do not appear to meet these limits.

RECOMMENDATIONS

Noise mitigation measures needed to achieve the sound level limits have been developed. Suggested mitigation measures for Cadbury to be in compliance at their existing receptors are shown in Table 1. Table 2 provides the additional mitigation needed to achieve compliance at 17 Ewen Road after Cadbury is in compliance at its existing receptors. A third scenario presented in Table 3 has been developed where the two parties work cooperatively and take advantage of the other’s mitigation needs. Cost sharing would enable both parties to achieve the desired end goal for a reduced total cost. The benefit to cooperation is accentuated because in general it is significantly more costly to retrofit existing mitigation measures to make small increases in the amounts of mitigation needed. It is in the interest of both parties to work co-operatively towards an optimized combined solution.
CONCLUSIONS

An assessment of noise from the adjacent Cadbury facility has been completed. Since noise impacts from the Cadbury facility are predicted to be above the LU-131 limits, detailed analysis was used to develop these suggested mitigation scenarios. If Cadbury applies for a CofA, then Cadbury is responsible for bringing their facility into compliance with respect to existing noise receptors. These mitigation measures are presented in Table 1. However with the development of the Auburn residence, additional mitigation will be required on the Cadbury facility as described in Table 2. The additional cost of further mitigation on Cadbury noise sources is Auburn’s responsibility. It is therefore suggested that Cadbury and Auburn work together to achieve compliance with their respective MOE guideline limits.

If you have any questions or concerns, please do not hesitate to contact our office.

Sincerely,
RWDI Air Inc.

Nigel Taylor
Project Manager
Table 1: Mitigation Needed for Cadbury to Comply at Existing Noise Receptors

<table>
<thead>
<tr>
<th>Cadbury Source Name</th>
<th>Required Mitigation</th>
<th>Suggested Mitigation Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan aircoils Hussman</td>
<td>10</td>
<td>Low noise fans, barriers</td>
</tr>
<tr>
<td>Fan aircoils Blanchard Bohn</td>
<td>-</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Fan aircoils Carrier</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Boiler stack 1</td>
<td>-</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Boiler stack 2</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Cooling tower 1</td>
<td>10</td>
<td>Silencer or acoustic louvre</td>
</tr>
<tr>
<td>Cooling tower 2</td>
<td>10</td>
<td>Low noise fans</td>
</tr>
<tr>
<td>Exhaust stack 1</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 2</td>
<td>20</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Exhaust stack 3</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 4</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 5</td>
<td>10</td>
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</tr>
<tr>
<td>Exhaust stack 6</td>
<td>-</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Exhaust stack 7</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 8</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Exhaust fan 09</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Exhaust fan 10 CARNES</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 11</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 12</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Gas valves</td>
<td>-</td>
<td>n/a</td>
</tr>
<tr>
<td>Refrigeration units on trucks</td>
<td>33</td>
<td>Full enclosure of trailer or on-facility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cooling equipment</td>
</tr>
<tr>
<td>Sidewall fan 01</td>
<td>-</td>
<td>Silencer, acoustic louvre</td>
</tr>
<tr>
<td>Bulk unloading</td>
<td>8</td>
<td>Silencer on trucks, or enclosure for trucks,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or unloading with on-site pump</td>
</tr>
<tr>
<td>Bulk unloading</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Fan aircoils ICP</td>
<td>-</td>
<td>Low noise fans, barriers</td>
</tr>
<tr>
<td>Fan aircoils Trane 01</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Fan aircoils Trane 02</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Fan aircoils Trane 03</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Note: All mitigation values are a reduction of the overall noise source sound power level in decibels (dB).

n/a – not applicable
# Table 2: Mitigation Needed for Compliance at the Auburn Development, after Mitigation of Existing Noise Receptors

<table>
<thead>
<tr>
<th>Cadbury Source Name</th>
<th>Required Additional Mitigation</th>
<th>Suggested Mitigation Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan aircoils Hussman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan aircoils Blanchard Bohn</td>
<td>5</td>
<td>Low noise fans, barriers</td>
</tr>
<tr>
<td>Fan aircoils Carrier</td>
<td>7</td>
<td>Upgrade from 5</td>
</tr>
<tr>
<td>Boiler stack 1</td>
<td>12</td>
<td>New</td>
</tr>
<tr>
<td>Boiler stack 2</td>
<td>12</td>
<td>Upgrade from 10</td>
</tr>
<tr>
<td>Cooling tower 1</td>
<td>15</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Cooling tower 2</td>
<td>15</td>
<td>Silencer or acoustic louvre</td>
</tr>
<tr>
<td>Exhaust stack 1</td>
<td>15</td>
<td>Low noise fans</td>
</tr>
<tr>
<td>Exhaust stack 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 4</td>
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<td></td>
</tr>
<tr>
<td>Exhaust stack 5</td>
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<td>Exhaust stack 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 8</td>
<td>10</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Exhaust fan 09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaust fan 10 CARNES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 11</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 12</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Gas valves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigeration units on trucks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sidewall fan 01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk unloading</td>
<td>20</td>
<td>Silencer on trucks, or enclosure for trucks, or unloading with on-site pump</td>
</tr>
<tr>
<td>Bulk unloading</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Fan aircoils ICP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan aircoils Trane 01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan aircoils Trane 02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan aircoils Trane 03</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* All mitigation values are a reduction of the overall noise source sound power level in decibels (dB). 

n/a – not applicable
Table 3: Mitigation Needed for Compliance at Existing Noise Receptors and Auburn Development based on Cooperative Effort

<table>
<thead>
<tr>
<th>Cadbury Source Name</th>
<th>Required Mitigation</th>
<th>Suggested Mitigation Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan aircoils Hussman</td>
<td>7</td>
<td>Low noise fans, barriers</td>
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<tr>
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<td>5</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Fan aircoils Carrier</td>
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</tr>
<tr>
<td>Boiler stack 1</td>
<td>12</td>
<td>Low noise fans</td>
</tr>
<tr>
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<td>12</td>
<td></td>
</tr>
<tr>
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<td>15</td>
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<td>15</td>
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<tr>
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<td>10</td>
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<td>Exhaust stack 2</td>
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<tr>
<td>Exhaust stack 4</td>
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<tr>
<td>Exhaust stack 5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 6</td>
<td>-</td>
<td>n/a</td>
</tr>
<tr>
<td>Exhaust stack 7</td>
<td>10</td>
<td>Stack silencer</td>
</tr>
<tr>
<td>Exhaust stack 8</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Exhaust fan 09</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Exhaust fan 10 CARNES</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Exhaust stack 11</td>
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<td>Exhaust stack 12</td>
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<td>-</td>
<td>n/a</td>
</tr>
<tr>
<td>Refrigeration units on trucks</td>
<td>33</td>
<td>Full enclosure of trailer or on-facility cooling equipment</td>
</tr>
<tr>
<td>Sidewall fan 01</td>
<td>17</td>
<td>Silencer, acoustic louvre</td>
</tr>
<tr>
<td>Bulk unloading</td>
<td>20</td>
<td>Silencer on trucks, or enclosure for trucks, or unloading with on-site pump</td>
</tr>
<tr>
<td>Bulk unloading</td>
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<td></td>
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<tr>
<td>Fan aircoils ICP</td>
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</tr>
<tr>
<td>Fan aircoils Trane 01</td>
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<td></td>
</tr>
<tr>
<td>Fan aircoils Trane 02</td>
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</tr>
<tr>
<td>Fan aircoils Trane 03</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Note: All mitigation values are a reduction of the overall noise source sound power level in decibels (dB). n/a - not applicable
May 20, 2009

Kristen Barisdale
GSP Group
72 Victoria Street S., Suite 201
Kitchener, ON N2G 4Y9

Re: Auburn Development on 17 Ewen Road
Letter of Opinion
RWDI Project 0940414A

Dear Ms. Barisdale,

RWDI AIR Inc. (RWDI) has been retained by GSP Group (GSP) on behalf of Auburn Developments, which is currently seeking approval to rezone lands located at 17 Ewen Road in Hamilton, Ontario. Auburn Developments has proposed to construct a 10-storey student residential building. It is our understanding that Cadbury Adams (Cadbury) manufacturing facility, located directly south of the potential development, is concerned with noise reflections off of the proposed building. As part of the rezoning change, GSP would like to address their concerns by providing a letter of opinion. In this letter of opinion, noise reflections from the proposed building and their off-site noise impacts are discussed.

Offsite impacts from Cadbury were modelled with and without the proposed Auburn Development. Modelling was performed using a software implementation of the ISO 9613 environmental noise propagation algorithms. This model is consistent with previous RWDI environmental noise work for the Auburn Developments project proposed to be located at 17 Ewen Road in Hamilton, Ontario.

Modelling results are shown in the attached Figures 1 and 2. Figure 1 shows 50 dBA daytime noise impact contours with and without the proposed development. These contours correspond to the default daytime NPC-205 urban noise guideline limits. Figure 2 shows 45 dBA night-time noise impact contours with and without the proposed development. These contours correspond to the default night-time NPC-205 urban noise guideline limits.

Modelled noise impacts to the north of the proposed development are greater without the development. Whereas modelled noise impacts to the south of the proposed development are greater with the development.

In areas where reflections from the proposed development are predicted to increase the impacts from Cadbury, changes are never greater than 2 dB. Thus, noise increases related to reflections from the proposed development are not predicted to be noticeable. Furthermore, these areas with 2 dB changes

Reputation Resources Results
Tel (519) 823-1311 Fax (519) 823-1316 E-mail: info@rwdiar.com Web: www.rwdiar.com
only exist outside of the 45 dBA impact contour. This change was conservatively calculated assuming no ambient background noise. Thus, noise increases related to reflections from the proposed development are predicted to be insignificant.

In conclusion, impacts related to reflections from the development proposed to be located at 17 Ewen Road in Hamilton, Ontario are predicted to be insignificant.

Yours very truly,

RWDI AIR Inc.

Project Manager / Senior Engineer
Legend

50 dBA Contours

--- Day - without development
--- Day - with development

Image © 2009 First Base Solutions, Image © 2009 Google
June 22, 2009

GSP Group Inc.
201-72 Victoria Street South
Kitchener, Ontario N2G 4Y9

Attn: Ms. Kristen Barisdale, MCIP, RPP
Email: kbarisdale@gspgroup.ca

Re: Auburn Developments – 17 Ewen Road, Hamilton Project
Applicability of Receptor-Based Mitigation Measures
RWDI Project W07-5023A

RWDI AIR Inc. (RWDI) was retained by GSP Group Inc., on behalf of Auburn Developments to conduct an environmental noise assessment for their proposed 17 Ewen Road development, located in Hamilton, Ontario. The focus of the study was on noise impacts from Cadbury Adams (Cadbury) plant, located adjacent and to the south of the site.

Detailed noise modelling of Cadbury was conducted, and our results were summarized in a memo dated November 21, 2007.

Under Ministry of the Environment (MOE) Publication LU-131, mitigation at the source of the noise (i.e., Cadbury, in this case) is preferred. Tables outlining the noise sources at Cadbury requiring mitigation for various scenarios were provided in the November 2007 memorandum.

Receptor-based mitigation (i.e., at the proposed development, instead of at Cadbury) is allowed under Publication LU-131 in certain circumstances. The mitigation would involve the use of central air conditioning and sealed (inoperable) windows. These may be considered as a possible mitigation measure option:

- For high-rise multiple unit residential uses; and
- When the area is designated by the municipality as undergoing a transition from industrial to residential land uses;

Per our conversation, this appears to be the case for the 17 Ewen Road site; thus, under LU-131, mitigation at the development may be allowed.

The required receptor-based mitigation would be:

- a) Mandatory central air conditioning of the development,
June 22, 2009
Ms. Kristen Barisdale, MCIP, RPP
Auburn Developments – Ewen Road Project

b) Sealed (inoperable) windows,

c) No balconies or outdoor amenity areas on the exposed side of the building, directly facing Cadbury,

d) The following noise warning clauses registered on Title:

"Purchasers are advised that due to the proximity of adjacent industries, including Cadbury, sound levels from these industries may at times be audible."

and

"Purchasers are advised that despite the inclusion of noise control measures within the development area and within individual building units, noise levels may become of concern, occasionally interfering with some activities of the occupants."

Should you have any questions or concerns, please feel free to contact us.

Yours very truly,

RWDI AIR Inc.

[Signature]

Project Director / Associate
Figures
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<table>
<thead>
<tr>
<th>Figure No.</th>
<th>Cadbury Building</th>
</tr>
</thead>
</table>

**Environmental Noise Assessment – Stationary Noise**
17 Ewen Road Project, Hamilton, Ontario

Scale: N.T.S
Date: 10/11/02
File No.: 10-0100
Drawn By: SLP

**Cadbury East Facade**

**Cadbury West Facade**

TRU “reefer” units
Figure No. 6

Cadbury Building
45 Ewen Road Facility
Noise Sources

Environmental Noise Assessment – Stationary Noise
17 Ewen Road Project, Hamilton, Ontario

Scale: N.T.S
Date: 10/11/02
File No.: 10-0100
Drawn By: SLP

17 Ewen Road – Subject Property

Additional Refrigeration Truck Parking
Loading Docks (Refrigeration Trucks)
Refrigeration Fan Air coils (3)
Various Rooftop Exhausts
Refrigeration Fan Air coils (3)
Extension to Building Since 2008
Rooftop and Sidewall Exhausts
Refrigeration Fan Air coils (1)

Cooling Towers (2)
Bulk Unloading (2)
Appendix "D" to Report PED09103(b) (Page 55 of 60)

Note:
- No refrigeration trucks operating during measurements
- No bulk unloading activity taking place during measurements

Aerial Image from Google Earth Pro

Figure No. 7
Cadbury Facility Noise Measurements
November 5, 2010

Environmental Noise Assessment – Stationary Noise
17 Ewen Road Project, Hamilton, Ontario

Subject Property
Noise-Sensitive Residential Land Use
Noise Sensitive Commercial / Institutional Land Use
Cadbury Site Property Line
Noise Measurement Location

Scale: 1:2,500
Date: 10/11/02
File No.: 10-0100
Drawn By: SLP

NOVUS ENVIRONMENTAL
150 Research Lane, Suite 150
Guelph, ON, Canada, N1G 4T2
t: 226.706.8080 f:226.706.8081
www.novusenv.com
Future Buildings Scenario
Worst-Case Daytime Period (between 0700-2300h)
Includes Truck Unloading
Noise contours at 1.5 m height above grade (1st storey Living Room window)
Existing Buildings Scenario
Worst-Case Night-time Period (between 2300-0700h)
No Truck Unloading (Prohibited by Noise Bylaw)
Noise contours at 4.5 m height above grade (2nd storey bedroom window)

Figure No. 10
Cadbury Facility Noise Predictions
Worst-Case Daytime (0700-2300h)
Future Buildings
Based on 2007 Noise Emission Data

Environmental Noise Assessment – Stationary Noise
17 Ewen Road Project, Hamilton, Ontario

Scale: 1:5,000
Date: 11/01/21
File No.: 10-0100
Drawn By: SLP
Note:
In the future scenario with the proposed 17 Ewen Road residential building in place, the position of the noise contours are slightly shifted to the south in some locations. This is due to reflections off of the new higher building facade. However, the change at any given location will be a fraction of a decibel, and is therefore insignificant and would not affect mitigation requirements for existing locations.
May 2, 2011

City of Hamilton
Development Planning Section, Planning Division
Planning and Economic Development Department
71 Main Street West, 5th Floor
City of Hamilton
L8P 4Y5

Attention: Ms. Diana Yakhni

Dear Ms. Yakhni:

Re: Environmental Noise Assessment
   Stationary Noise Impacts
   Peer Review
   Proposed 10 Storey Student Residence
   17 Ewen Road
   City of Hamilton
   Our File: 06-086-12

   VIA E-MAIL
diana.yakhni@hamilton.ca

As requested by the City of Hamilton, we have reviewed the Environmental Noise Assessment prepared by Novus Environmental Services Inc. dated January 24, 2010, received by our office March 28, 2011.

The acoustical modelling is acceptable. Our comments, provided below, are related to the application of the Ministry of the Environment (MOE) guidelines.

1. There appears to be a typo in the date of the report as throughout the report there are references to measurements conducted in November, 2010.

2. In Section 2.1 of the report a significant number of potential noise sources are identified. The conclusion is that none of these sources are acoustically significant. We do not concur with this conclusion, without further investigation being undertaken. The proposed development is a high-rise building that will have residential units "looking" at the rooftop equipment of these uses. Additional analyses should be undertaken to ensure that these sources meet the MOE guidelines. These types of sources do not require Certificates of Approval; however, the proponent of the sensitive land use adjacent to these sources still needs to evaluate them to determine their potential acoustical impact on the proposed development.
3. The report makes reference and recommendations based on the MOE draft NPC-300 guideline. This proposed guideline has no status at this time and therefore should not be included in noise reports. However, we will provide comments related to the applicability of this draft guideline because it is referenced in the Novus Report.

4. For an area to be classified as Class 4 under NPC-300, the municipality needs to designate the residential area as such, as noted on page 13 of the Novus report.

5. Even with the higher sound level limits and receptor based mitigation permitted in NPC-300 for a Class 4 area, the sound level limits must be met at the façade of the residential building. This is not the case for 17 Ewen. An exceedance is still predicted at the façade of the building without mitigation at the Cadbury building. See Table 7, page 18.

6. The report indicates that the Cadbury facility is a Class 2 industry under the D-6 Guidelines. Based on the Categorization Criteria in Table 2 (included on page 4 of the Novus report), Cadbury produces sound frequently audible off the property, has large production levels and has continuous movement of products on a 24 hour basis. Based on this level of activity Cadbury would be classified as a Class 3 industry. The recommended setback from a Class 3 industry is 300 m with the zone of influence being 1000 m. It should be noted that the separation distances are recommended and not required.

7. The Cadbury facility is required to have a valid Certificate of Approval (C of A). In reviewing the EBR it appears that Cadbury applied for a C of A but then withdrew the application April 30, 2010. Kraft Canada also located at 45 Ewen Road has made an application for a C of A in February 2011. The details of their application are not known. Therefore as it does not appear that Cadbury has a C of A, mitigation only at the proposed student residence to achieve the MOE guidelines will be difficult to implement.

8. The unmitigated sound levels at the façade of the proposed building are 62 dBA to 65 dBA during the daytime and 60 dBA to 62 dBA during the nighttime. This is a 12 to 15 dB exceedance over the daytime 50 dBA criterion and 15 to 17 dB exceedance over the nighttime 45 dBA criterion. The report indicates that sealed windows and central air conditioning are acceptable for this type of building. The MOE guideline, LU-131 on page A5 clearly indicates that central air conditioning can be used under certain conditions, but becomes less acceptable as higher sound levels. Due to the magnitude of the predicted exceedance, central air conditioning is not an acceptable solution in this case.
9. The report recommends sealed windows. Is this acceptable under the OBC for this type of use?

10. The report discusses the use of Enclosed Noise Buffer Balconies (ENB balconies), though it does not recommend this approach. While this concept is in the draft NPC-300 document, it has been used in many other situations under LU-131 and NPC-205 to provide compatibility between unlike uses.

11. Page 15, Section 3.5, bullet 3, Cadbury is required to ensure that the limits of NPC-205 are met at existing and future receptors. However, future receptors only applies to lands that have been designated/zoned residential/sensitive use, not for lands that are currently undergoing redesignation or rezoning.

12. The amount of mitigation required at Cadbury to meet the guidelines at this proposed development is significant and may not be feasible. Discussions with Cadbury should be undertaken. The City of Hamilton may be able to facilitate this meeting to evaluate the possible mitigative measures and the associated costs.

Based on our review of the noise report and associated issues additional work in the form of discussions with Cadbury, inclusion of all stationary sources in the analysis and/or a re-design of the proposed building to incorporate enclosed balconies is required prior to approving the intended use.

Please note that Jade Acoustics Inc. have conducted this review to the best of our ability using accepted guidelines/criteria. However, we will not be held responsible for the conclusions of the Novus Environmental Inc. report or for the City of Hamilton's comments to the proponents.

If there are any questions or if additional information is required, please do not hesitate to call.

Yours truly,

JADE ACOUSTICS INC.

Per: Daltia C. Giusti, P.Eng.
SEP 30 2011

September 26, 2011

The City of Hamilton
Planning & Economic Development Department
71 Main Street West
Hamilton, ON
L8P 4Y5

Attention: Mr. Edward John

Dear Sir:

Re: Auburn Developments Inc.
Official Plan and Zoning By-law Amendments
17 Ewen Road, Hamilton

On behalf of Auburn Developments, I am pleased to hereby enclose the final response to peer review comments for the above-noted project. You will recall that, at the direction of the Economic Development and Planning Committee, that a peer review of the Comprehensive Noise and Emissions Assessment for the above-noted project be undertaken. That original assessment was submitted to you in February 2011 and we subsequently received a response from Jade Acoustics Inc. on behalf of the City (the peer reviewer) in May 2011.

Most recently, Novus Environmental discussed directly with Jade Acoustics Inc. the noise mitigation strategy in preparing the attached final response. It now appears that Jade Acoustics Inc. (City peer reviewer) and Novus Environmental (Developer’s consultant) are in agreement on the methods to be imposed for the mitigation of noise being emitted from the adjacent Kraft industries.

Accordingly, we respectfully request that this matter be presented back to the City of Hamilton Economic Development and Planning Committee with a recommendation for approval.

Your previous staff report (PED 09103(a)) recommended approval, subject to the application of a holding provision. I confirm that Auburn Developments has no concern with this same strategy, noting that the lifting of the holding provision would be subject to formal site plan approval and confirmation that the Enclosed Noise Buffer (ENB) balcony design is acceptable.
Could you kindly advise of the timing of bringing this matter forward for consideration of committee. In the meantime if you have any questions, please do not hesitate to contact me.

Yours truly,

GSP Group Inc.

Chris Pidgeon, MCIP, RPP

Encl.

c.c. Jamie Crich – Auburn Developments
Councillor Brian McHattie – Ward 1 Councillor
Art Boiajo
September 23, 2011

Chris Pidgeon, MCIP, RPP
GSP Group Inc.
201-72 Victoria Street South
Kitchener, ON N2G 4Y9

Email: cpidgeon@gspgroup.ca

Re: 17 Ewen Road Development
Response to Peer Review Comments
Novus File No. 10-0100

Dear Chris,

This letter presents responses to the comments contained in the Jade Acoustics Inc. (Jade) peer view of our noise report for the 17 Ewen Road development.

1.0 Summary and Conclusions

We have reviewed Jade’s peer review comments. Detailed responses to each comment are provided in Section 2 below.

While we disagree with Jade on whether a sealed window design would be acceptable, we do agree that the use of an Enclosed Noise Buffer (ENB) Balcony design would also adequately control noise impacts at the proposed residences, and would ensure that the noise level limits would be met at the affected noise-sensitive windows.

It is our understanding that the design for the development will be redone to include the use of ENB balconies. We trust that the inclusion of this measure would eliminate many of Jade’s concerns.

2.0 Response to Specific Comments

Jade’s specific comments are provided in italics.
1. There appears to be a typo in the date of the report as throughout the report there are references to measurements conducted in November 2010.

Correct. The report should be dated January 2011.

2. In section 2.1 of the report, a significant number of potential noise sources are identified. The conclusion is that none of these sources is acoustically significant. We do not concur with this conclusion, without further investigation being undertaken ...

As discussed in our report, we disagree that numerical assessment of impacts is required, for the following reasons:

- The "sources" in question are land uses such as restaurants, places of worship, clinics, and commercial stores.
- None of the land uses listed at the start of Section 1 contain equipment which would require a Certificate of Approval (Air & Noise).
- All of them are located near or adjacent to existing noise sensitive land uses, or are themselves noise sensitive uses.
- These land uses are located to the north, northwest and northeast of the 17 Ewen Road site, at significant distances from the proposed building.
- The facades of the 17 Ewen Road building which are exposed to these noise sources are also exposed to significant amounts of road traffic noise from Main Street, and therefore would have higher noise limits under Publications LU-131 and NPC-205. This is especially true for upper storey locations “looking down” on the sources.
- As a result, none of the land uses, individually or in total, produce noise which is audible at the 17 Ewen Road site.

In summary, given the fact that none of the land uses have significant noise sources, none of the use produce noise which is audible at the property, and all would be assessed against elevated guideline limits, a detailed assessment of impacts is not required.

3. The report makes reference and recommendations based on the MOE draft NPC-300 guideline. This proposed guideline has no status at this time and therefore should not be included in noise reports. However, we will provide comments related to the applicability of this draft guideline because it is referenced in the Novus Report.

We agree that the draft NPC-300 guideline is not currently in force. Our analysis and recommendations are based on the currently in-force guideline Publications LU-131 and NPC-205.

However, given that the MOE has embarked on a process to revise and combine LU-131 and NPC-205 into a new guideline, we believe it would have been irresponsible of us not
to have discussed the implications of the new guideline with respect to on-going compliance of the Cadbury facility.

In addition, as discussed in the Novus Report, the current drafts of NPC-300 do provide documentation on the MOE’s current thinking with respect to guideline application.

4. **For an area to be classified as Class 4 under NPC-300, the municipality needs to designate the residential area as such, as noted on page 13 of the Novus report.**

5. **Even with the higher sound level limits and receptor based mitigation permitted in NPC-300 for a Class 4 area ... an exceedence is still predicted at the façade of the building without mitigation at the Cadbury building...**

Agreed. Again, our report does not rely on compliance with NPC-300 guidelines, but rather, uses mitigation measures which are allowed under applicable LU-131 guidelines.

6. **The report indicates that the Cadbury facility is a Class 2 industry under the D-6 Guidelines. Based on the Categorization Criteria in Table 2 (included on page 4 of the Novus report), Cadbury produces sound frequently audible off the property, has large production levels and has continuous movement of products on a 24 hour basis. Based on this level of activity Cadbury would be classified as a Class 3 industry. The recommended setback from a Class 3 industry is 300 m with the zone of influence being 1000 m. It should be noted that the separation distances are recommended and not required.**

We disagree with the industry classification. While the Cadbury facility does produce sounds which are frequently audible off the property, it does not have large production levels, outside storage of raw or finished products (e.g., outdoor stockpiles), and open process typical of a Class 3 industry. Indeed, as a food manufacturer, its process must be closed and indoors. Nor does the facility match any of types or scales of the example plants shown in The D-6 criteria for Class 3 industries.

Regardless, we agree with Jade that it is a difference which makes no difference, in that the setback distances are recommendations only, and not requirements (as discussed in Section 2.6 of the Novus report). There are 15 existing noise-sensitive land uses with the Class 2 setback of 70 m; there would be dozens more in the 300 m Class 1 setback.

The determination of whether the industry is Class 2 or Class 3 does not affect our conclusions with respect to noise mitigation requirements at the proposed development.

7. **The Cadbury facility is required to have a valid Certificate of Approval (C of A). In reviewing the EBR it appears that Cadbury applied for a C of A but then withdrew the application April 30, 2010. Kraft Canada also located at 45 Ewen Road has made an application for a C of A in February 2011. The details of their application are not known. Therefore as it does not appear that Cadbury has a C of A, mitigation only at the proposed student residence to achieve the MOE guidelines will be difficult to implement.**
We agree. The Cadbury facility is currently out of compliance with NPC-205 guideline limits at numerous existing noise-sensitive receptors. Section 4.4 of the Novus report outlines the mitigation measures which would be required to achieve compliance at the existing receptors. Forcing the developer of the 17 Ewen Road site to pay for mitigation which is required to address existing noise exceedences at existing noise sensitive receptors would be one-sided and unreasonable.

8. The unmitigated sound levels at the façade of the proposed building are 62 dBA to 65 dBA during the daytime and 60 dBA to 62 dBA during the nighttime. This is a 12 to 15 dB exceedance over the daytime 50 dBA criterion and 15 to 17 dB exceedance over the night-time 45 dBA criterion. The report indicates that sealed windows and central air conditioning are acceptable for this type of building. The MOE guideline, LU-131 on page A5 clearly indicates that central air conditioning can be used under certain conditions, but becomes less acceptable as higher sound levels. Due to the magnitude of the predicted exceedance, central air conditioning is not an acceptable solution in this case.

We disagree. Even under existing unmitigated conditions, sealed windows and air conditioning will adequately reduce noise from Cadbury operations. We have calculated the worst-case indoor sound levels which would be anticipated through windows meeting minimum Ontario Building Code requirements for thermal performance. The resulting indoor sound levels would meet MOE Publication LU-131 and American National Standards Institute (ANSI) and American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE) recommended indoor sound levels.

Regardless, the developer of the project has agreed to consider other solutions, as discussed under Item 10 below:

9. The report recommends sealed windows. Is this acceptable under the OBC for this type of use?

We have confirmed that sealed windows would be acceptable under the OBC.

10. The report discusses the use of Enclosed Noise Buffer Balconies (ENB balconies), though it does not recommend this approach. While this concept is in the draft NPC-300 document, it has been used in many other situations under LU-131 and NPC-205 to provide compatibility between unlike uses.

We agree that this solution would adequately reduce impacts. The method was not recommended since it our opinion based on our analysis that the sealed windows and air conditioning as originally planned would be sufficient.
Regardless, the developer is amenable to this solution, and has agreed to redesign the development to incorporate ENB balconies as a receptor based mitigation measure, instead of using sealed windows.

The Enclosed Noise Balconies would be designed to meet the requirements outlined in the draft NPC-300, namely:

- Not less than 1 m and not more than 2 m deep
- Fully enclosed with floor to ceiling glazing or combination of solid parapet with glazing above. Glazing can be operable to maximum limit permitted by the OBC
- Not air conditioned or heated, but can be mechanically ventilated and supplied with tempered air
- Finished on the interior surfaces only with weatherproof materials typical of unenclosed outdoor balconies (e.g., concrete floor and ceiling, metal, brick or precast walls (no gypsum board))
- Separated from the interior space through a weatherproof boundary of exterior grade wall, exterior grade windows, exterior grade doors, or combinations thereof, in compliance with minimum exterior envelope requirements of the OBC
- Of sufficient horizontal extent to overlap windows of noise sensitive spaces such as bedrooms, living rooms, dining rooms, dens, and kitchens but not necessarily bathrooms or service-type areas.
11. Page 15, Section 3.5, bullet 3, Cadbury is required to ensure that the limits of NPC-205 are met at existing and future receptors. However, future receptors only applies to lands that have been designated/zoned residential/sensitive use, not for lands that are currently undergoing redesignation or rezoning.

Agreed. Again, we note that Cadbury operations do not meet these requirements at existing noise sensitive receptors.

12. The amount of mitigation required at Cadbury to meet the guidelines at this proposed development is significant and may not be feasible. Discussions with Cadbury should be undertaken. The City of Hamilton may be able to facilitate this meeting to evaluate the possible mitigative measures and the associated costs.

Extensive discussions were undertaken with Cadbury in 2007-2008. Again, the development and installation of noise mitigation and the associated cost to ensure that the guidelines are met at existing receptors is Cadbury’s issue.

Closing

In summary:
- Kraft does not currently have a valid Certificate of Approval (Air & Noise) (C of A) for their facility.
- Numerous existing residential uses lie within the Class 2 and Class 3 recommended minimum setback distances outlined in MOE Guideline D-6
- The applicable NPC-205 guideline limits are currently exceeded at these existing residences.
- Kraft should be responsible for mitigate their at-source noise levels to within acceptable MOE standards (i.e., NPC-205) at these locations, and should obtain a valid C of A.
- Notwithstanding this, Auburn proposes to mitigate noise levels to meet MOE standards through Enclosed Noise Balconies, in accordance with Jade’s recommendation.

Sincerely,

Novus Environmental Inc.

R. L. Scott Penton, P.Eng.,
Principal / Specialist
October 24, 2011

City of Hamilton
Development Planning Section, Planning Division
Planning and Economic Development Department
77 James Street North, Suite 400
City of Hamilton
L8R 2K3

Attention: Ms. Diana Yakhni

Dear Ms. Yakhni:

Re: Environmental Noise Assessment
    Stationary Noise Impacts
    Peer Review
    Proposed 10 Storey Student Residence
    17 Ewen Road
    City of Hamilton
    Our File: 06-086-12

As requested by the City of Hamilton, we have reviewed the letter "Response to Peer Review Comments" prepared by Novus Environmental Services Inc. (NES) dated September 23, 2011, received by our office on October 6, 2011.

The letter notes areas where we differ from NES with respect to the interpretation of the Ministry of the Environment (MOE) guidelines and implementation of these guidelines. However, as the developer/builder has agreed to implement the Enclosed Balconies as the means of mitigation, there is no further need to discuss the differences.

On this basis I find the responses to my comments of May 2, 2011 to be acceptable.

Please note that Jade Acoustics Inc. have conducted this review to the best of our ability using accepted guidelines/criteria. However, we will not be held responsible for the conclusions of the Novus Environmental Inc. report or for the City of Hamilton's comments to the proponents.

If there are any questions or if additional information is required, please do not hesitate to call.

Yours truly,

JADE ACOUSTICS INC.

[Signature]

Per:

[Signature]

D.C. GIUSTI
L.P. Engineer

[Stamp]

L:\Peer Reviews\06-086-12 Response 17 Ewen Road Oct 25-11 (D. Yakhni).doc